
INFORMATION PLEASE ALMANAC 1949

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JOHN KIERAN, *Editor*

Planned and Supervised by

DAN GOLENPAUL ASSOCIATES

Editorial Staff

Marcus Duffield

Cyrus LeRoy Baldridge

Research

Leonard Baron Rosen

Ronald Kurtz

Muriel Hecht

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FOREWORD



WITH THIS 1949 EDITION OF THE INFORMATION PLEASE ALMANAC we feel that we have taken another full step toward the goal we have had in mind since the outset of this voluminous venture; the production of the best of all possible almanacs. We have tried hard to improve the book each year and we hope that our readers have noticed not only the effort but the successful result. We cheerfully admit that we have not yet arrived at perfection and once again we trust that our readers, always our best friends and occasionally our severest critics, will help us by pointing out any errors they may find in text or tables. The pointing, it is tactfully suggested, should be more in sorrow than in anger.

The task of gathering, collating, editing and publishing facts and figures of local, national and international interest or utility is a formidable one in these turbulent times. So swift is the march of historic events and so sudden the shift in the cast of characters that what may be set down as true today of a powerful politico, a national government or a vast financial program should carry the warning that runs regularly on railroad timetables: "Subject To Change Without Notice." The staff of the *Encyclopaedia Britannica*, presenting again the imposing section of the *Information Please Almanac* titled "Other Nations Of The World," acknowledges with profound thanks the collaboration of more than a hundred officials of foreign countries who gathered statistical, biographical and historical material for them to include in that section. Yet such is the unsettled condition of much of Europe and Asia that there are gaps in text and charts. It is difficult to obtain accurate figures from some troubled regions and impossible to obtain them in others.

Because of such difficulties, we take special pride in our annual almanac feature that is, in effect, a "book within a book," the leading section for this year titled "How Man Lives," a social, political and economic survey and report of world conditions by experts and officials of twenty leading countries. This section was the bright idea and has been the particular care of Mr. Dan Golenpaul who devised and produced the "Political Guide" that featured our 1948 edition. Mr. Golenpaul traveled swiftly abroad and labored mightily at home in the preparation of his special section because of the importance of such a presentation to our readers at this time. We commend it for thorough reading and serious thought. We commend also the sprightly special articles, the reviews of the year by authorities in their fields such as John Chamberlain (Books), Louis Kronenberger (Theatre), Irving Kolodin (Music), Bert Andrews (Washington), Kyle Crichton (Movies) and Red Smith (Sports). We would like to think that our subscribers get out of this book as much as we put into it. To make sure, we urge our readers to turn to the index as they would to an old friend, confident that the response will be immediate and effective.

In conclusion, we acknowledge with deep gratitude the contribution to the production of this book made by the *Encyclopaedia Britannica*, the *Research Institute of America*, the *New York Herald Tribune* and the faithful and industrious staff in our own office.

JOHN KIERAN, *Editor*



HOW MAN LIVES

Under CAPITALIST—SOCIALIST—COMMUNIST *Governments*

Edited by DAN GOLENPAUL

Associate Editor: Harry W. Laidler

Research: Sophie Lippman and Gordon Kahn

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INTRODUCTION to HOW MAN LIVES



WHEN JOHN KIERAN AND I first talked over the idea of this section on Capitalism, Communism and Socialism," John groaned. "You're going to have plenty of trouble getting all the material together," he predicted. "And when you do get it together, somebody's sure to accuse you of being biased one way or another." John was right on the first count. There was plenty of trouble. Tangling with our own government bureaucracy is bad enough, but our task involved getting data from a couple of dozen bureaucracies all over the world. It was a long pull, but in the end we were surprised and pleased at the large number of governments which had cooperated with us—including the Soviet Union.

It remains to be seen whether John was right about our getting kicks. If anybody accuses us of being pro-this or pro-that, the answer is that we're pro-intelligent thinking about the most fundamental problem of our civilization.

We are providing in this section a worldwide forum in which the exponents of the three systems of government can present their own cases. We have published their articles without any changes or deletions. These are their opinions, not ours. Our responsibility was simply to make sure that all the contributors were highly qualified authorities.

Countless volumes have been written about capitalism, communism and socialism, of course. But I believe this is the first time that the official and authoritative advocates of the various systems have joined issue in one book.

The whole world is engaged in a struggle of ideologies. One thing is certain: all peoples want peace and security. The question is how to achieve these goals. Will communism do it? Or socialism? Or capitalism? Must one of these systems ultimately emerge triumphant? Or can all three systems live peaceably side by side, satisfying man's wants each in its own way? Or will there be in the course of time cross-breeding of the ideologies?

These are questions which only time can answer. But they are questions every one of us should be thinking about. What we are doing in this section is to spread before the reader the most authoritative facts and opinions we can gather—and present them as the raw material for thinking.

Now, if you look at it one way you could say that this section contains propaganda for this system or that. In a sense it does. All governments have something to sell to the world, and we are giving them a platform for their sales talk. We think our readers are grown-up enough to bear that in mind. The American people are not so easy to fool as some people think. Totalitarian states make the tragic mistake of not recognizing this fact. Disaster might have been spared the world if Hitler and his propagandist, Goebbels, had realized in advance that they couldn't pull the wool over Americans' eyes.

You can't lick propaganda by shutting your eyes and stopping up your ears. The thing to do is drag it out into the open, study it, analyze it. General Eisenhower said it well in his inaugural address as President of Columbia University, October 12, 1948:

"There will be no administrative suppression or distortion of any subject that merits a place in this university's curricula. The facts of communism, for instance, shall be taught here—its ideological developments, its political methods, its economic effects, its probable course in the future. The truth about communism is, today, an indispensable requirement if the true values of our democratic system are to be properly assessed. Ignorance of communism, fascism, or any other police-state philosophy is far more dangerous than ignorance of the most virulent disease."

You might have thought that the exponents of the various ideologies would have jumped at the chance to lay their cases before the American people in this book. Well, it wasn't that easy.

We had the very best cooperation from England, but even there we ran into a minor snag. We had hoped that the government would prepare an official article for us. But there is a British tradition that no cabinet member may write a signed article for a foreign publication. Therefore, we turned to Mr. Morgan Phillips, General Secretary of the Labour party, to present the case for British socialism. And, in order to get the other side of the picture, we turned to Mr. R. A. Butler, spokesman for the Conservative party. It developed that their views were not so far apart as we had expected, so we asked them to do rebuttals.

We were particularly interested in France, because here all three ideologies—capitalism, communism and socialism—were clashing at the same time and in the same arena. We had the freest access to officials of the government and to leaders of French socialism. But do you think we had any luck getting a statement out of Jacques Duclos, leader of the French Communists? We sent a member of our organization to France. She failed even to make contact with the officials of the Communist party. I thought she wasn't resourceful enough, so decided to take a crack at it myself. I spent a solid week in Paris pursuing Communist officials. The nearest contact I could make was through a friend of a friend of mine who was able to get Jacques Duclos' secretary on the phone. She said she would call us back and let us know. She never did. I can only guess as to why the Communists were so secretive. In any case, we decided that since we could not get a round-up of all three ideological viewpoints in France, we would not present an incomplete report.

We had the same sort of trouble with other Communist organizations. We asked the Cominform (the International Communist Information Bureau) to contribute an article. We wrote them several letters, offering them the pages of our book without any restrictions, and our invitations were completely ignored. We also tried to get a statement from a leading Communist of Yugoslavia, who is at odds with the Cominform. Again, nothing doing.

Meanwhile, we had been in communication with the Soviet Embassy in Washington and with the Soviet government in Moscow, seeking an official statement about the accomplishments of communism. After we had virtually given up hope, the office phone rang. The Soviet Embassy in Washington was calling. An article had been prepared by the Soviet Information Bureau in Moscow for the *Information Please Almanac*. Did we still want it? We did! You will find it in this section, exactly as written. As far as we know, it is one of the rare instances—possibly the only instance—in which the Soviet government has contributed to an American book. We present it without any comment. The reader can make his own comment on this as well as all other articles in the section.

Our policy throughout has been to balance off the "pros" and the "antis" by presenting the views of the official opposition parties. This works all right in a democracy, but in a totalitarian state no official opposition party is allowed to exist. There may very well be groups in Russia who are op-

posed to Stalinism, but much as we would like to, we can't get at them. It would have been easy enough to get somebody in America to tear communism apart. That, however, would not have constituted a statement of official opposition within Russia, and therefore would not have been consistent with the pattern of the book.

An exception to the pattern in this section is a historical survey of the origins and growth of the various ideologies, written by Dr. Harry W. Laidler, President of the National Bureau of Economic Research, and author of *Social-Economic Movements*. Dr. Laidler is also Executive Director of the League for Industrial Democracy, which advocates socialism. We asked Dr. Laidler to write for us not as a Socialist but in his capacity as an economist and historian. We believe he has achieved the objectivity for which we asked.

In reading these manuscripts, many thoughts have come to my mind, as they will to yours. I noticed throughout these pages that "Rightists" and "Leftists" alike renounced the old laissez-faire idea that government should keep its hands entirely off a nation's economy. "Rightists" and "Leftists" alike agreed that some degree of government participation was necessary to provide job security and other public services having to do with health, housing and education.

None of our contributors believes there should be a passive acceptance of poverty. This strikingly reflects the changing trend of opinion all over the world in recent years. You remember the old adage, "The poor will always be with us." You recall the feeling that poverty was an incentive to greater activity. The attitude is different now. Unemployment and hunger no longer are considered inevitable or a blessing. Upon the shoulders of governments now rests the responsibility for eliminating them.

The realization that poverty is a barrier to progress and that a higher standard of living is a necessity for our civilization gives hope that, barring the disaster of war, the next decade will see a better life built for all peoples. The potentialities for greater productivity, with or without atomic energy, form the physical basis. The political and psychological basis is that millions of people who helped fight in the last war for a better world are insisting that governments see to it that the world does become better—and governments are accepting that idea.

DAN GOLENPAUL, *Editor*

HOW MAN LIVES



A WORD OR TWO

by

GEORGE BERNARD SHAW

*W*HILE VISITING LONDON this summer in connection with this special section, the editor read a letter in the London Times of Aug. 19, 1948, by George Bernard Shaw. He thought that it would make an interesting addition to our section and wrote to Mr. Shaw asking for permission to reprint it. This he generously granted—and also blue pencilled our title: **CAPITALIST-SOCIALIST-COMMUNIST** and substituted instead: **PLUTOCRATIC-DEMOCRATIC-MARXIST**. As usual GBS has the last word.

Sir: May I, as a man of letters, appeal to the Government to appoint a Select Committee to settle our political nomenclature? The matter is extremely urgent; for the present confusion of tongues is leading straight for a war which none of the Powers can afford and nobody desires. Until we clear up our political nomenclature, our political oratory and journalism can come to nothing but the pot boiling the kettle black without either of them knowing what they are talking about. We all lack a common and exact dictionary, and are at dangerous cross purposes over imaginary differences and decisive agreements that are only verbal. I myself find it impossible to make myself understood, though when I describe myself by this or that adjective I know precisely what I mean. As a citizen and one of the founders of British Fabian policy I am basically a Marxist Communist; but I cannot say so without being set down as an infantile advocate of catastrophic inter-rection, with capitalism in full swing on Monday, revolution on Tuesday, and Socialism in full swing on Wednesday. I do

not wish to see private enterprise made a felony: on the contrary, I look to private enterprise for experiment and invention in industry, art, and science as the proper sphere of individual talent and genius in the leisure which Socialism alone can gain for everybody. There is the alternative of State-aided enterprise, largely practised here in public utility schemes and friendly societies and the like. As these are so well spoken of here, why in the name of common sense should they under their Italian name of Fascism be denounced as murderous anti-Semitic tyrannies?

Communism and private enterprise are only methods of civilization, each with its proper sphere. Communism, like private enterprise, has to have many methods, one being distinguished as Socialism. Bread and milk could be communized like street-lighting and sewerage, and suburban travelling by rail or air made free of fares, because everybody needs them; but it would be silly to provide trombones, microscopes, cyclotrons, ounces of radium, atomic bombs, and hundred-inch astronomical telescopes for everybody. Every-

body does not use them, nor could afford them if they did. They must be provided by various and mixed social methods. They cannot be sold to the public over the counter like postage stamps.

Compensation for confiscated private property is nonsense; but to nationalize or municipalize any acre or share of private property at the expense of its particular proprietor is manifestly unjust: he should be paid its market price at the expense of the whole body of proprietors, including himself, by taxation of income. But the process should be called adjustment, not compensation. The Liberal Party delayed temperance legislation for 20 years by mistaking this adjustment for compensation.

Pressingly important just now is the difference between diplomatic arrangements and human rights. Mr. Bevin, speaking colloquially, declared that we have a right to be in Berlin, and mean to stay there, following this by a flourish of implacable detestation of Communism. As this implied war on Russia, the four military commanders governing the four zones into which the military occupation of Berlin had been divided began skirmishing to the extent of every annoyance they could inflict on one another short of actual shooting. Yet if Mr. Bevin is not fundamentally a Communist he is not a civilized man.

Now, we have no divine right to be in Berlin, nor has the Soviet, the State Department in Washington, nor the French Republic. We are there as invaders and conquerors, as Mahomet and Joshua were in Palestine and William the Conqueror in England. There is nothing to prevent all or any of us from withdrawing from Berlin if such a rearrangement should seem expedient. Such withdrawals can be ranked as defeats only if they are fought for instead of negotiated.

There are several alternatives to play for. There is the unity of Germany. There

is the division of Germany into two federations, western and eastern, with the western capital in Frankfurt and the eastern in Berlin. There is Germany disarmed or not. There is Germany disabled industrially by reparations, formerly called plunder, or not. England and America care not a snap of their fingers whether Germany is disarmed or not; France is mortally afraid of her anyhow; Russia is out for precautions. The three European Powers would have to borrow the cost of another war from the United States, and bilk their creditor as in 1914-18: a transaction which America could not afford.

I am stating the obvious facts, not advocating the various views one way or the other. I am insisting that negotiation is impossible unless the parties use the same words for the same things, and understand what the words mean. The present Babel threatens a war that nobody wants, countered by a flood of Conscientious Objection from those who think that their rulers are backing the wrong horse, as we did in the American civil war until Karl Marx protested, in South Africa until Ibsen protested, and in Russia after 1917 until our Proletariat began setting up little imitation Soviets all over the place.

I repeat that I am not here advocating this or that policy, party, or personality. I am asking all the politicians, all the partisans, all the eminent personalities to support my demand for a Select Committee on political nomenclature, charged with the production of a political dictionary before the next General Election, on the common ground that logomachy is the very devil. Even liars need a language that will enable them to lie unambiguously. To the truthful the present impossibility of wording their messages without being misunderstood is an agony.

A dictionary will not cure our habit of mistaking association of ideas for logic, but it will do all that can be done at short notice to clear our heads.



MAN AND FREEDOM

by

HAROLD E. STASSEN

President, University of Pennsylvania

MAN LIVES BEST when he has the maximum of individual freedom consistent with the enjoyment of the same degree of freedom by his fellow men. This is the broad premise which I would first demand and then interpret. I consider this to be the basis of true liberalism. There would appear to be little need for argument that man's enjoyment of life in a social sense, his cultural development, his adjustment to his environment, all occur to the higher degree when he is free, and has the opportunity to make choices. It is not an accident that from the earliest days a form of punishment of man was to take away his liberty of action either by direct confinement or by exile to a limited area. Clearly from the standpoint of man's desires there can be little doubt that man by his very nature wants the opportunity to follow his own inclinations, to make his own decisions.

It is my view that not only is this the most advantageous from a social or cultural or religious basis, but that in fact it also results in the greatest material production. When an individual is free to work and invent, to buy and to sell, to build and produce, as he decides, rather than as directed by an agent of a government, the result is a tremendously increased total accomplishment.

This approach to our subject silhouettes immediately both the strength and weakness of the capitalist economy and the points of comparison with socialist or communist economies.

We are gradually evolving in the United States of America an economy which can best be described as a modern people's capitalism. It should be clearly distinguished from the autocratic brand of capitalism of the tsars and of the Nazis. In my conference with Generalissimo Stalin, in the Spring of 1947, his statements indicated that he looked upon capitalism in the United States as the same kind of economy which Germany had under Hitler. To a citizen of the United States this seems a very strange reference, and it does emphasize the importance of a careful definition and description of our subject. The capitalism of the tsars and Nazis, while continuing private ownership, clamped down upon the owners such a complete dictation of what they must do with their property, and subsequently what the workers must do, that there is actually very little difference between that brand of autocratic capital-

ism, and a state socialism in which actual ownership passed to the government.

Modern people's capitalism must also be distinguished from the early English and French laissez-faire capitalism. If government keeps its hands off the economic system entirely it is obvious that the profit motive leads to monopolies, to abuse of workers, to corruption of government itself, and to greedy imperialism. Laissez-faire capitalism proceeds upon a worship of individual economic freedom without the proper regard for safeguarding of equal freedom by others.

Beginning with the factory reform acts in England in the 1820's and particularly developing with the Sherman Antitrust Act of 1890, in this country, we have recognized the need of placing limitations upon capitalism to insure that the freedom of one would not wipe out the liberties of another.

It is my hope that in the years ahead we in America will continue to develop this people's capitalism. It will require a constant study of abuses and maladjustments, and the establishment of rules of the economic road, of curbs against excesses, of brakes on inflationary rises and cushions for deflation. It is my hope that we will neither make the mistake of having government pull back from its responsibility for the broad public interest in its relationship to the economic system, nor of having government step in to ownership or detailed dictation in economic affairs to its individual citizens.

Enjoying the freedoms under such a system, man seeks constant progress in minimizing its weaknesses. Thus we note a constant demand that prices should be held down and that wages and earnings should go up. More and more of the necessities and conveniences of life developed by the inventiveness and mass production are sought by all.

This desire can be scoffed at as very unrealistic, but in fact it is a very natural human desire for improvement in material well-being. As the productivity of man has increased and as abuses in our economic system have been decreased there has been a very real advance in standards of living. Under a people's capitalism this advance can continue with increased productivity and improved techniques of manufacture and distribution. Difficulty arises through impatience for an improvement more rapid

than the increased production through improved techniques will permit. This results in an inflationary pressure that causes spiraling prices, taking away most of the raises in wages. An extreme economic pinch results for those of fixed income, and for the pensioners, white-collar workers, and holders of annuities.

A second strong desire is for job security so as to be protected against economic reverses or an employer's whim. The development of strong unions has quite thoroughly covered the latter and only the success of the economic system as a whole in avoiding depressions can really safeguard the former.

A third strong desire of man is to be protected against that period of time when he is not able to earn his own way, whether it be through advanced age or through illness or accident or other unforeseen circumstances. Here again great progress has been made in the development of security systems, of necessity with governmental action. This is a good program and is not antagonistic to capitalism. It need only be kept in sound financial balance between the benefit that it pays and the tax that it levies upon both workers and employers.

A large percentage of the citizens living under a people's capitalism, by reason of the large production and general high standard of living, feel quite secure as to their material needs. Their greatest desires are for increased cultural opportunities and for greater appreciation of the spiritual side of life.

Throughout the entire society of modern capitalism there is a very widespread desire to exercise leadership. This is a natural outgrowth of the unusual freedom which each enjoys. It is in this opportunity for leadership, which consequently develops management and executive ability in a wide variety of activities, that modern capitalism is most distinct.

The opportunities for leadership are vividly demonstrated in some of the earlier life histories. It is still taking place in varying degrees in each of these fields. In the fields of politics and government, Abraham Lincoln began his career as a poor boy in a log cabin and became one of the great Presidents of all time.

In business, Andrew Carnegie began as

a bobbin boy in a cotton factory earning \$1.20 a week and became the world's leading steel magnate and later donated two hundred and fifty millions of dollars to philanthropic enterprises.

In science, Thomas Edison began as a poor newspaper boy and invented not only the incandescent light, but a myriad of other conveniences.

In letters, Benjamin Franklin began as a poor boy and became publisher of the *Saturday Evening Post*, founder of the University of Pennsylvania and of the American Philosophical Society, a signer of the Declaration of Independence, a participant in the Constitutional Convention, and Ambassador to France.

In the field of labor, Samuel Gompers began in a London tenement, secured employment in a New York cigar maker's shop, and became leader of the U. S. labor movement and founder of the American Federation of Labor.

No other society keeps its avenues as open for non-violent progress up and down among its members. This is the essence of the dynamic quality of modern people's capitalism.

A people's capitalism with a representative government of free citizens results in a greater diffusion of power than any other system. It thereby not only grants the greatest freedom, but has the highest assurance of continued freedom. Both communism and socialism center, of necessity very great economic powers in the hands of the same men who also hold the ordinary powers of government. The result is a concentration of power which inevitably leads to abuse, and to mounting dictation over the individual citizen.

It is the great tragedy of our time that Russia in breaking away from the autocratic capitalism of the tsars moved into an autocratic socialism of the *Politburo* instead of evolving a form of a people's capitalism with increased freedom for its citizens.

The hope of the future is that there may be a world-wide recognition that economic freedom is inseparable from the other freedoms. Man's fundamental desire to be free points the way for the best hope of both peace and progress.



CAPITALISM, SOCIALISM, COMMUNISM

A HISTORICAL SKETCH

by

HARRY W. LAIDLER

President, National Bureau of Economic Research

Executive Director, League for Industrial Democracy; Author of *Social-Economic Movements*

CAPITALISM, SOCIALISM, COMMUNISM. These three systems are now contending for the allegiance of the two and a quarter billion people who inhabit the globe. The *United States* is the leading exponent of the capitalist order; *Soviet Russia*, of communism; *Great Britain*, of a democratic socialist commonwealth.

What will be the result of the struggle now being waged among these social systems and philosophies few historians will dare confidently to prophesy. All that most historians will predict is that the world of the future will be far different.

They will point to the past, where economic and social change has been constantly seen. In ancient times, primitive tribes lived by hunting and fishing. Then came the tending of flocks. Then the growing of crops brought a more stable agricultural civilization. Slavery rose and fell under the Greek and Roman Empires. Feudalism and serfdom rose and fell in the Middle Ages.

Finally came the group struggles and industrial advances that paved the way for modern capitalism.

Capitalism

Under capitalism, industry is privately owned and operated for private profit. Under modern capitalism, there is usually found a rather high development of machinery and industrial arts; business concerns employing large bodies of workers; a laboring class willing to work for hire; extensive and accessible markets, and a possessing class desirous of applying its wealth, in whole or in part, to profit-making industrial enterprises.

Modern capitalism emerged out of the "industrial revolution" in England during the middle of the eighteenth century. Prior to this "revolution," the typical employer in industry was the small, independent businessman who frequently combined farming with industry, and employed one or two journeymen and apprentices. There was often a warm feeling of attachment between master and wage-earner. The worker hoped one day to own the inexpensive tools with which he worked and start a business of his own.

Prior to the "industrial revolution" also, trade and industry were hedged about by many state regulations. England had laws

regulating wages, apprenticeship and labor conditions generally, giving judges power to fix prices, and permitting the state control of industrial life by proclamation.

Then came, in the eighteenth century, the steam engine and the power loom, the spinning machine, improved roads, the opening of new markets, and the expansion of domestic and foreign commerce. The rising employing class found that the old system of state regulation was unfitted to the rapidly changing conditions brought about by machine production. Economists, led by Adam Smith, advocated the philosophy of *laissez faire*—the philosophy which assumed that, if each individual pursued his own economic interests, the good of society as a whole would best be served. The state should therefore refrain from all activity in the economic field beyond the minimum interference necessary to secure protection of life, property, and the enforcement of contracts. The rising industrialists, adopting this philosophy, demanded that the "fetters of state regulation" be broken.

The new order of things brought about many changes. With the development of machine production, factories took the place of household industry. Large populations crowded in smoky industrial centers; personal ties between employer and worker became few and far between.

Since the days of the "industrial revolution," steam and electricity have largely taken the place of the muscles of men and beasts and we have been brought to the threshold of the atomic age. Costly machines have supplanted the hand tool, increasing the productivity of labor many fold. The average man in the United States, we are told, can now produce about five times as much in an hour as he did in 1850.

Side by side with these changes, markets for industrial products have expanded from the immediate neighborhood to the world. Great banking and credit agencies have emerged to finance industry's expanding operations. Corporations have more and more supplanted the family-owned firm, and the giant corporation has become the dominant unit in industry and finance. In the United States before World War II, the 200 largest nonfinancial corporations of the country owned about 55 percent of all the assets of the nonfinancial corporations

in the country. In manufacturing, 1.1 percent of the firms—those employing 500 or more workers—accounted for 48 percent of all manufacturing employment.

Competition has, moreover, been greatly restricted through the formation of trusts, monopolies, holding company control, interlocking directorates, "gentleman's agreements" and trade association practices. And the old time proprietor who owned, promoted and managed his business has been gradually giving way, on the one hand, to the inactive, absentee stockholder who holds legal title to the corporation, and, on the other hand, to executives and managers who have little or no share in the ownership of the industry and who are frequently able to concentrate in their hands almost unlimited power over the conduct of the business. A survey conducted by the Federal Trade Commission some years ago brought out the fact that the officers of 4,000 companies, representing a cross section of American industry, owned on the average only 10.7 percent of the common stock of the firms in which they worked and only 5.8 percent of the preferred stock.

Accompanying these trends, the average man has become increasingly literate. Workers have organized in trade and industrial unions to an ever greater extent, with a view of improving their standards of living. Consumers in many countries have developed strong cooperative movements. Citizens, discarding the extreme *laissez-faire* philosophy as inadequate to the needs of the times, have brought increasing pressure upon the state to pass legislation protecting the interest of business, of farmers, consumers and wage earners. They have helped swing the pendulum of state action back, and the state has assumed an increasing number of positive functions.

Even in the United States, regarded as the very citadel of private enterprise, city, state and Federal governments perform many services formerly left to private enterprise in the fields, among others, of education, health, recreation, highway construction, conservation, water supply, electrical generation and distribution, housing, insurance, banking and credit. As a result of all these changes, consumer goods have vastly increased, and many things regarded as luxuries in former generations are looked upon today as life's necessities.

These developments have been accompanied by numerous changes in the political structure of nations. Many governments have become increasingly democratic. However, in the 1920's and 1930's, Mussolini, Hitler and other dictators were able to destroy democracy in Italy, Germany and other lands and to establish totalitarian forms of government. Various factors helped them—economic insecurity, nationalistic aspirations, racial intolerance, etc.

Beginnings of Modern Socialism

In the middle of the nineteenth century, there arose in Europe, among many who had felt the lash of poverty, as well as among numerous intellectuals and idealists who sensed social injustices, a demand for fundamental change from the capitalist to a cooperative order of industrial society.

At that time, two brilliant German students of social development, Karl Marx, a Doctor of Philosophy of the University of Jena, and Friedrich Engels, a German economist and businessman, worked out a new theory of social change. These young men, then in their late twenties, were asked in 1847 by a small group of German revolutionists, organized in a League of Communists, to prepare a *manifesto* which would incorporate their ideas of social revolution. The result was the *Communist Manifesto*, issued in early 1848, a publication which signaled the birth of the modern socialist philosophy and movement.

The *Manifesto* declared that the history of the past had been a history of class struggles between exploiting and exploited classes. Under the capitalistic system, the chief struggle was one between the employing class and the wage-earners. With the development of capitalism, said Marx and Engels, industry tended to concentrate into fewer hands. Small businessmen, unable to compete with big business, tended to sink into the workers' ranks swelling them.

As labor grew numerically more powerful, it was compelled to organize in the economic and political fields, first locally, then nationally, and finally internationally, according to Marx. At first, labor worked for better conditions within the capitalist system. As economic crises became more menacing, and as labor's sense of social injustice increased, the workers tended to urge the abolition of the system of private ownership of the means of production, the "forcible overthrow of all existing social relations," and the inauguration of a cooperative social order.

Some weeks after the *Manifesto* was published, the French Revolution of 1848 broke out. In France and throughout Europe, the revolutionary movement at first seemed to be victorious. But defeat followed and most of the men and women in the Communist League had to go underground, or to flee their respective countries.

The First International

In the following years, movements of workers aiming at fundamental social change began to revive. In the early sixties, the foundation was laid for the socialist movements of Germany and other continental countries. In 1864 the First International was formed in London by Karl Marx and others to serve as a guiding center of working-class activities.

As the sixties advanced, many members of the International tried to use it as a center for secret insurrectionary plotting. Karl Marx fought that trend. He favored open political action. In 1872, at a meeting of the International at The Hague, he locked horns with the anarchist leader, Mikhail Bakunin, and, fearing that the International might fall into the hands of his opponents, urged its transfer to the United States. The majority of delegates followed his advice, and an International headquarters was set up in New York. By 1878 it was dying.

Socialists Urge Peaceful Social Change

In 1883, Karl Marx died. During the latter part of his life, he witnessed, on the one hand, the failure of numerous abortive violent revolutions, and, on the other hand, the growth of peaceful methods of social change. Workers were winning the vote and using their political power to form parties of their own. Strong trade unions were being organized. The consumers' co-operative movement was beginning to show surprising strength. Factory legislation was being enacted to protect workers. Also, more and more workers were being taught the "three R's," and could argue their case before the bar of public opinion.

Witnessing these developments, Marx became convinced of the increasing possibility of nonviolent progress from capitalism to socialism. In his Hague address in 1872, he declared that it was folly to contend that the way to reach the goal was the same everywhere. "We know that the institutions, the manners, and the customs of various countries must be considered," he said, "and we do not deny that there are countries like England and America, and . . . I might even add, Holland, where the worker may attain his objects by peaceful means. But not in all countries is this the case."

Marx's partner, Friedrich Engels, also was impressed in his latter years with the increasing possibility of democratic social change. In 1895, six months before his death, Engels declared (see Laidler, *Social-Economic Movements*, pp. 146-7) that history had proved that Marx and he were wrong in believing that a social revolution would follow the uprisings of 1848.

"The time is past," he said, "for revolution carried on by small minorities at the head of unconscious masses. The irony of history turns everything upside down. We, the 'revolutionists,' the 'upsetters,' we strive much better with legal than illegal means in forcing an overthrow."

During these years, when Socialists turned increasingly to a belief in peaceful and democratic change, the original name "communism" was gradually placed in the discard, and the word "socialism" was al-

most universally used to describe the movements aiming at the attainment of a cooperative commonwealth.* The international agency with which these socialist movements were affiliated before World War I was the Second International, formed in Paris in 1889.

Principles and Tactics of Socialists

By the beginning years of the twentieth century, Socialists affiliated with the Second International were in general committed to the following propositions:

1. That the capitalist system was a necessary step in industrial evolution; that it expanded the productive forces of a community, but that it possessed inherent evils. Among the chief evils were: recurring economic crises, accompanied by mass unemployment; inequalities of wealth and income; undemocratic concentration of industrial and social power, and the subordination of human welfare to private profit.

2. That capitalism should gradually give way to a socialistic system under which the principal industries of a nation would be socially owned by society and democratically managed for the public good.

3. That this change should be brought about in democratic countries through education, the development of mass political and economic organizations, and the election of labor and socialist representatives to office followed by the enactment of the necessary legislative measures.

4. That democratic institutions should be preserved and strengthened; freedom of press, of assembly, of religion, and of organization should be safeguarded; strong, democratic trade union, cooperative and cultural movements should be fostered.

5. That compensation should be paid for property acquired by the State, and industry should be taken over gradually over a series of years.

6. That the State need not take over all industries and services but could leave to private or cooperative management such activities as agriculture, retail distribution, handicrafts, certain professions and opinion-forming services, and newer luxury industries.

Before World War I, Socialists did much effective work in fighting for political democracy and for social legislation, in strengthening the trade union and co-operative movements, and educating the masses in the political and economic needs of their time. Socialist, Social Democratic

*Since the Russian Revolution, the term "Communist" usually refers to an adherent of the philosophy and tactics of Lenin, Stalin, and other leaders of the U.S.S.R. However, there are throughout the world many who call themselves Communists who are anti-Stalinists, and claim Trotsky, Lenin or some other leader or former leader of Russian revolutionary thought as the bearer of the true communist message.

and Labor parties constituted important political movements in Germany, Austria-Hungary, France, Belgium, the Netherlands, Italy, Great Britain, Scandinavia and other lands.

Socialist and labor representation in 1914:

Country	Number of socialist deputies	Total numbers
Austria-Hungary	82	516
Belgium	39	186
Bulgaria	20	211
Denmark	32	140
Finland	90	200
France	101	602
Germany	110	397
Great Britain	42	670
Italy	80	508
Netherlands	19	100
Norway	23	123
Russia (socialist, 14; labor, 10)	24	383
Sweden	73	230
Switzerland	18	187

The Birth of the Russian Communist Movement

While the Socialists in western democracies in Europe were dedicating their efforts to peaceful and democratic social change, the Russian socialist movement, operating under a tsarist dictatorship, was divided on the tactics it should pursue.

The Russian Social Democratic Labor party held its second congress at Brussels and London in 1903 and urged the creation of a republic in Russia.

This Congress, however, revealed a wide difference of opinion among its leadership. One group, led by Nikolai Lenin, urged a rigidly centralized party dictatorially ruled by a group of professional revolutionaries. "It would be far better," declared Lenin, "that ten men who worked should not call themselves members of the party than that one chatterbox should have the right and the opportunity to become a member."

The Lenin point of view was vigorously opposed by Martov, who fought for a democratic, self-governing working-class party with freedom for local groups. Followers of Lenin secured a majority on the central committee, and this majority faction became known as the Bolsheviks, later Communists. The Martov faction assumed the name of Mensheviks, or minority.

In the 1904 congress, the Bolsheviks and the Mensheviks came to grips again, this time over the question of socialist policy in case of a political revolution in Russia. The Mensheviks said they would be satisfied if the monarchy were overthrown and a democratic constitution drawn up. Marx taught, they declared, that capitalism had a historic mission to perform. Russia was not yet sufficiently advanced industrially, nor the working class sufficiently educated and organized for a democratic government

to step in and acquire the nation's industries. Russia was not ripe for socialism.

The Bolsheviks, under the leadership of Lenin, maintained that it was possible for Russia to jump from an undeveloped capitalism to socialism without passing through the advanced capitalist stage. Russia had near its borders highly industrialized countries. A Russian revolution might well light a flame that would spread throughout Europe. The advent of revolutionary governments in other European countries would, in turn, make it possible for Russia to adapt itself to the requirements of a socialist society. Furthermore, Russia for some years might well serve as an agricultural storehouse for the more industrialized part of the world.

Communist Tactics in Russian Revolution

The Mensheviks in the 1905 congress won a majority in the Russian Social Democratic party. But Lenin and others carried on a ceaseless campaign within and without the country for their view. They elaborated their philosophy and tactics during the next decade or so in part as follows:

1. *Violent vs. Peaceful Change.* The transformation from capitalism to communism cannot be effected peacefully. During times of social peace it is legitimate for Communists to enter Parliament, but largely to explain "why the capitalist system should be overthrown," and to use the parliamentary struggle (Stalin, *Leninism*, p. 23) "as a fulcrum for the organization of the extra-parliamentary struggle of the proletariat."

2. *The Militant Minority.* In the development of the revolutionary struggle, chief reliance should be placed not on the workers in general, but upon "a conscious, militant, revolutionary minority of workers in city industries."

3. *Ripeness for Revolution.* This militant minority should not start a civil uprising before the time is ripe. The ripeness of the time depends not on the stage of development reached by capitalism, but on the relative strength of the classes and on the general international situation. "When all the forces of classes hostile to us are sufficiently wasted in internecine quarrels and weakened in their mutual strife [Stalin, *Leninism*, pp. 98-9]; when all the intermediate elements which are hesitating and unstable (i.e., the petite bourgeoisie) are sufficiently unmasked, and their prestige lowered by their failure in practice; when the mass of the proletariat begins to applaud the most revolutionary acts against the bourgeoisie, then the time is ripe for revolution."

4. *Seizure of Power.* In preparing for the revolution, Communists should use any weapon that gives promise of achieving their ends. Besides the temporary use of parliamentary and agitational methods,

They should stage street demonstrations, initiate general strikes, urge insurrections in the army and navy, and arm the workers. When the revolt is actually set into motion, Communists should seize such strategic sources of power in a community as public buildings, munition plants and arsenals, the means of communication, of transportation, of light and power, and the sources of public information. They should shatter the old state machine, and inaugurate a dictatorship of the proletariat.

5. *Collectivization of Industry.* When once in power, Communists, their leaders declared, should proceed to the transfer of industry from private hands to the State.

6. *Withering Away of the State.* After the liquidation of the capitalist class and other noncommunist elements which refused to accept communist leadership, the dictatorship could be eased, and the State would be allowed to "wither away."

Lenin and his Bolsheviks successfully employed these foregoing tactics in Russia during the days of the November Revolution of 1917. First they joined with non-Communists in overthrowing the monarchy and in setting up the provisional government. Later, despite the fact that the Kerensky cabinet was composed of members of four socialist and two liberal parties who had agreed on an extensive program of socialization, the Communists engineered a *coup d'état* for the overthrow of the government. Following its capture, they established the Soviet government. Instead of instituting a "dictatorship of the proletariat," they created a dictatorship of an inner circle of the Communist party. Instead of preparing the soil for the "withering away" of the State within the next decade or so, they developed one of the most powerful pieces of state machinery in history and denied freedom of party organization, of speech, of assembly and of press to all who opposed government policy.

Of the control of the Soviet government prior to World War II, Joseph E. Davies, the U. S. Ambassador to Russia before this conflict, declared in his *Mission to Moscow* (pp. 402-03): "The government, in fact consists of a very small group of men who control the Communist party. The government is no more than the agent of the Communist party, and takes orders from it. Realistically, the government is in fact one man—Stalin—the strong man, who survived the contest, completely disposed of all competitors, and is completely dominant. . . . The government is a dictatorship not 'of the proletariat,' as professed, but 'over the proletariat.'"

Others take the position that the real rulers of Russia are the Politburo members, the "board of directors" of the Central Committee of the Communist party. Stalin himself said (Stalin, *Leninism*, Vol. I, p.

23, 1928) that, "no important political or organizational problem is ever decided by our Soviets and other mass organizations without directives from the party. In this sense we may say that the dictatorship of the proletariat is substantially the dictatorship of the party, as the force which effectively guides the proletariat."

As for the economic structure, the government at first concentrated on the running of the railroads and other key industries. In June, 1918, it decreed the nationalization of all large industries. By the year 1937, 98.7 percent of all the means of production in the Soviet Union were officially stated to be "socialized property," that is, controlled by the state or by the collective farms (M. T. Florinski, *Towards an Understanding of the U.S.S.R.*, p. 173). Of the gross production of industry, 99.8 percent came from State-owned enterprises, 98.6 percent of agriculture production was supplied by State or collective farms, while commerce was 100 percent in the hands of public or cooperative agencies.

The Communist International

Following the Bolshevik revolution of November, 1917, the newly formed Communist parties of the world met in Moscow, March 2-6, 1919, and organized the Communist Third International. The manifesto issued at the inauguration of this International condemned the gradualism of the leaders of the Second International and declared that "war against the socialist center is a necessary condition of successful war against imperialism."

The International condemned "bourgeois democracy" and maintained that the change to communism could be brought about only through extraparlimentary means. Believing that Russia would not be able successfully to defend the revolution within its borders unless the Bolshevik revolution spread to the industrialized nations, the leaders of communism urged left-wing elements to split away from the existing socialist and trade union movements and to form Communist parties and "Red" trade unions directed by central committees in Moscow.

In the second Congress of the Comintern in Petrograd and Moscow, held from July 19 to August 7, 1920, the assembled delegates were summoned to the work of the "world revolution" at once. It was this Congress which adopted the famous "twenty-one points" or conditions of admission to the Comintern. Parties wishing to join the International were admonished that they must create everywhere illegal machines to assist them in the hour of the revolution; carry on systematic campaigns among farmers, trade unions, consumer cooperatives and mass organizations; remove from posts in the labor movement all re-

formists and centrist elements; give unqualified support to every Soviet republic; "hinder the transportation of munitions of war to the enemies of the Soviet republic," and carry out all decisions of the International and its committees. The manifesto declared the Communists could have no confidence in bourgeois legality, as "in nearly every country in Europe and America, the class struggle is entering upon the phase of civil war."

Communists met with temporary success in several countries, but the world revolution failed to materialize. Instead, reaction set in. The communist-controlled governments in Hungary and Bavaria were replaced by extreme rightist regimes. Italy went fascist and the Nazis began their rise.

For this swing to reaction, many political students laid much blame at the door of the Communists. "I think it possible," declared Prof. Harold J. Laski (*Reflections on the Revolution of Our Time*, p. 84) in the early forties, "that had Lenin not precipitated the fatal split in the working-class forces implied in the foundation of the Third International, certainly not Hitler, and perhaps not Mussolini, would have attained power. But the preliminary conditions of their success was that, through Communist fanaticism, the organized forces of the working class were divided and hesitant when they could have been united and strong."

Relations with Social Democracy and Fascism

Without the hope of immediate world revolution, Russian leaders began in 1923 to use the Comintern as an agency to assist them in their fight to build up the Russian economy, and to help convince the masses at home that power should be concentrated still further in the hands of the ruling Soviet group. As a means to that end, they stimulated Communist parties throughout the world to broadcast the dangers of alleged imperialist aggression on the part of Great Britain, the United States and France. The Comintern officially branded the Social Democrats as "social fascists." Many Communists were of the opinion, in fact, that the destruction of social democracy in Germany, followed by a fascist dictatorship, was a necessary preliminary to communism in that country.

The central committee of the Communist International stated, "The establishing of an open fascist dictatorship in Germany by destroying all the democratic illusions among the masses and liberating them from the influence of social democracy, accelerates the rate of Germany's development towards proletarian revolution."* The German Communists joined with the Nazis to vote against the Socialist-led Prussian government. They helped organize the big traffic strike in Berlin less than three

months before fascism came into power. The strike, as Prof. Edward Heimann declared, "was a political action of the first order in size and success, organized by a strike committee which consisted of an equal number of official delegates from the Communist and Fascist parties, and designed to stir up the population against the Republic on the occasion of the approaching elections for Parliament—the last election under the Republic."†

After Hitler had risen to power, Moscow realized belatedly that he constituted a menace to Russia. Following the customary practice of using the Comintern to further Russia's interests, Moscow ordered an abrupt reversal of Comintern policy. The first convention in seven years was called in 1935, and all Communist parties were told to form united fronts with socialist forces in the fight to retain "bourgeois-democratic liberties" and to forestall the coming of fascism. The Socialists were no longer to be regarded as "social fascists," but as friends of democracy.

At the same time, Communists were warned that they should continuously combat the "illusion that it is possible to bring about socialism by peaceful, legal methods"; should use the united front movements to put their members and friends in a strategic position to lead labor to a proletarian dictatorship when the time was ripe.

For four years the Comintern took an active part in united front movements with Socialists and democratic forces. In many instances their maneuvers caused bitter controversy and rifts in the ranks of democracy, the question being whether to work with the Communists or not.

On August 24, 1939, Russia signed a friendship pact with Germany. Once again the Comintern line had to be abruptly reversed. Now Communists resumed attacking noncommunist forces. They renounced the "imperialistic war" being waged by Britain and France, and urged the United States to keep out of it.

On June 22, 1941, Germany invaded Russia. For the third time the Comintern line had to do a quick about-face. Suddenly the war had been transformed from an "imperialist" war to a "war for democracy."

Liquidation and Revival of International

As World War II advanced, Russian Communists decided that the Communist International was providing a stumbling block to the Soviet government in its relations with other governments of the

*International Press Correspondence, English edition, Vol. 13, No. 17 (April 13, 1932, p. 378); see Adolph Sturmthal, *The Tragedy of European Labor*, p. 206, p. 258. †Heimann, *Communism, Fascism or Democracy*, p. 189.

nited Nations. On May 22, 1943, the presidium of the Communist International declared that the Comintern had outlived its usefulness. It dissolved in June of that year. Despite this dissolution, however, the communist parties in the various countries closely followed, for the most part, the policies favored by the Soviet Union.

In September, 1947, the Russian Communists decided again to revive, in somewhat different form, their international organization. Representatives of communist groups in nine countries (Bulgaria, Czechoslovakia, France, Hungary, Italy, Poland, Rumania, Russia and Yugoslavia) met in Poland and formed a Communist Information Bureau (Cominform) to exchange experiences and coordinate activities. Later the Bureau invited all Communist parties to seek admission.

In justifying the establishment of the Cominform, the delegates present at its first gathering declared that the United States and England were engaged in strengthening imperialism, in "choking democracy," and in waging an unholy propaganda war against the Soviet Union. Thus it was necessary for the "anti-imperialistic democratic camp" to close its ranks and to fight against "imperialists" and their supporters, the "treasonable socialists" of the type of Léon Blum. One of the major immediate aims of the Cominform was to destroy the effectiveness of the European Recovery Plan, and thus to render the economic soil of Italy, France and other Western European countries increasingly fertile for communist propaganda, and the communization of Western as well as Eastern Europe.

In the spring of 1948, Marshall Tito and the Yugoslav Communist party withdrew from the Cominform on the ground that the latter tried to dictate Yugoslav internal policy, and particularly tried to force the Tito government to collectivize its farms—a measure which the Yugoslav peasants bitterly opposed.

Following this defection, the Cominform, in July, 1948, issued instructions to the Communist parties of the world to model their organization forms and rules on those of the Soviet Communist party. "Experience has shown," it declared, "that any violation of the basic organization principles in building Marxist parties weakens and dilutes them." Purges of "unstable" elements in numerous Communist parties followed the issuance of this declaration.

As has been indicated above, from the late twenties when Communists began to give up hope of immediate world revolution, to the end of World War II, Communist international policy was directed to advancing nationalistic interests of Russia and strengthening Russian dictatorship in carrying out its drastic internal policies.

Postwar Communist Tactics

During and after World War II, as a result of Russia's greatly enhanced military and political prowess, present-day Communists have added several chapters to the tactics they had enunciated in the early days. With respect to the comparatively small countries on and near their borders, they have made it a practice to utilize their military forces as invading or occupying armies or as possible invaders, to secure domination over the policies of these nations. In some cases, they have used the tactic of incorporating these neighboring nations in the Soviet Union; in other instances, they have brought pressure on them to form governments that could be absolutely depended on to do the bidding of the Russian leaders.

In other countries where Communists have attained considerable strength but where Russian military aid cannot readily be brought to their assistance, it has been the recent policy of Communists to involve socialist and progressive groups in united-front campaigns in the hope of winning a block of seats in Parliament and of then dominating the socialist allies.

If successful, the Communists press for important posts in the country's cabinet, including, where possible, the Ministry of Interior, in charge of police; the Ministry of Education and Propaganda; the Ministries of Foreign Affairs and of the Army.

Once in these strategic positions, they conjure up some excuse for calling a new election, such as an alleged plot of non-Communists for the overthrow of the government. In the ensuing campaign, they seek to ensure communist success at the polls by giving their followers campaign propaganda advantages, purging voting lists of "undesirable elements," and seeing that the polls are supervised by communist sympathizers.

Following "victory" at the polls, a communist-minded cabinet is usually formed, the government purged of noncommunist officials, a new constitution adopted, the civil liberties of opponents suppressed, and a communist dictatorship put into effect. A procedure of this type was followed in Czechoslovakia, where Communists, at present writing, have complete control of the government machinery.

Should Communists fail in their attempt to form a government, the steps to be taken would, under favorable circumstances, include the calling of political strikes and demonstrations, with a view to create an atmosphere favorable to a successful communist *coup d'état*.

As a result of such tactics, communist governments in the fall of 1948 were in power in the U.S.S.R., Czechoslovakia, Poland, Hungary, Rumania and Bulgaria, Northern Korea, and parts of China. Yugo-

Socialist and Communist Representation, 1948

(Lower chambers of parliaments in Democratic European countries)

Country	Socialists			Communists		
	No. of Socialists	% of total	Rank of party	No. of Communists	% of total	Rank of party
Austria	76	46	2	4	2.4	3
Belgium	70	35	2	23	10	3
Denmark*	57	38	1	9	6	5
Finland	54	27	2	38	19	3
France	103	17	3	186	30	1
Great Britain	397	62	1	2	0.3	4
Italy	33†	7.1	3	182‡	30.7	2
Luxemburg	11	20	2	1	5	4
Netherlands	29	29	2	10	10	4
Norway	76	50.7	1	11	7	4
Sweden	112	48.7	1	9	4	5
Switzerland	48	25	2	7	4	6

*In Iceland, formerly controlled by Denmark, there were, in 1948, 6 Social Democrats and 7 Communists out of 35 members of the lower chamber; a Social Democrat was Premier. †Right-wing Socialists. ‡The number representing the Popular Front, consisting of both Communists and Left-wing Socialists.

slavia likewise possessed a communist regime though refusing to follow the Cominform line. In general, the Communist parties, when in power, are pursuing a policy of state ownership similar to that carried out by Russia.

Status of Postwar Socialism

While communism has been expanding, partly through Russian force, socialism has also been gaining ground. In Europe in the early autumn of 1948, all-Socialist and all-Labor governments existed in Great Britain, Denmark, Sweden, Norway and Finland; in the Pacific, in Australia and New Zealand, and, on the American continent, in Saskatchewan, Canada, one of that country's western provinces. In Europe, Socialists were also represented in coalition governments in Austria, Belgium, France, Italy, Luxemburg, The Netherlands and Switzerland. They were potent forces in the western zones of Germany. In the Russian satellite countries, Socialists, largely under Russian pressure, became merged with the Communists, largely losing identity and power for independent action.

In Asia, the Socialists constituted the largest single party in Japan, with a 30-percent representation in Parliament. In India, the prime minister was an advocate of socialism. In Europe not under communist control, the socialist and communist representation in the lower houses of Parliament was as indicated in the above table.

Significance of British Labour Victory

In the inter-war days, the strength of the communist movement in several countries was due in part to mistakes of the European socialist movement and the inability

of the Socialists to advance convincing proof that their democratic tactics would succeed in ushering in socialism in countries of advanced capitalist industry.

Communists advanced the following arguments against Socialists, among others:

1. Socialists in office frequently failed to make a frontal attack on capitalism; often frittered away valuable energy on small reforms within the capitalist system.

2. Socialist leaders, at times, deserted the labor and socialist movement in a crisis.

3. Socialists, as in Prussia in 1933, failed to utilize the forces at their command to prevent the Nazi seizure of power.

4. Socialist reliance on peaceful democratic tactics was unrealistic, inasmuch as history showed that "no ruling class had ever voluntarily given up its power."

In rebuttal to the last contention, Socialists could point to the fact that Socialists had formed governments without violent opposition in Australasia and Scandinavia, and they could cite many instances in which capitalist states took over particular industries from private owners without bringing about a civil war. But in inter-war days they couldn't point to a large industrialized country where socialization of industry on a comprehensive scale had taken place through parliamentary means.

The election to office of the British Labour Party in July, 1945, by an overwhelming majority, gave Socialists their first real opportunity to prove that a fundamental change from capitalism to socialism in a major, advanced industrial nation could come without civil war and dictatorship.

If this government succeeds in its goal, it will take away from Communists one of their chief arguments against democratic socialism. It will demonstrate that social

planning for economic security can be a reality in a free society. It will provide a laboratory in social and economic experimentation that will be watched with tremendous interest by the people of the world, and will undoubtedly have a great impact upon the thinking and action of the peoples of both capitalist and communist nations.

The Modern Challenge of Capitalism

Meanwhile, in an age when millions of men and women throughout the world have been turning from capitalism to other systems, the capitalist system functions with vigor in the United States—the world's richest and most powerful nation.

Advocates of capitalism, here and abroad, point out that capitalism has thus far shown its ability to increase production manifold. The drive for profit activates innumerable inventions and technological changes, and today the United States is not only in a position to support a major part of its population on a standard of living higher than that in any other country in the world, but likewise to supply billions of dollars in goods and services to less fortunate peoples.

It is true, declare these advocates, that social evils still exist under capitalism. There are noteworthy injustices in the distribution of wealth and income. Periodic depressions have caused great suffering. Competitive wastes, as well as monopolistic practices, are in evidence.

But many of the worst abuses of the past have been reduced or abolished, and progress is being made in grappling with other evils, say capitalism's defenders.

The worker has, through many years of struggle, been able to acquire freedom to organize and bargain collectively. That freedom has made it possible for labor to share with management the determination of wages, of length of the working day, and of other conditions of labor.

The consumers possess the power to choose what they will buy, and to organize in cooperatives, and this power has in instances forced reduction of prices and improvement of quality of goods and services received by the consuming public.

Under capitalism, the common people have found it possible to protect their interests at the polls and in legislatures, and that power has been used to enact laws regulating business practices, reducing through taxation gross inequalities of income, protecting working and consumer groups, providing social insurance, and giving work to the unemployed.

While consistent defenders of capitalism, moreover, have opposed public ownership of a major part of industry, it has been possible under capitalism to secure the public ownership of a number of

essential utilities and services. Capitalism today thus differs greatly from that of a hundred years ago when the modern revolutionary movement had its birth. It has shown a far greater power than Marx and Engels ever dreamed of for adjustment to changing conditions, for expansion and improvement. As, in past generations, it has shown its ability to solve the problem of production, so, in future generations, many of its supporters believe, it may be depended upon to grapple successfully with the problem of distribution. The United States, the outstanding capitalist nation, is becoming the mecca of millions of people in every country of the world. Why not, ask the capitalists, strive further to improve the capitalist order, instead of overturning that order and substituting for it an untried system?

Socialists have their answers to the advocates of capitalism. They point out that, in trying to uproot the evils of capitalism, its upholders are turning increasingly to state and cooperative control over industry and the social services. If these evils, including mass unemployment, are to be fully eliminated, they ask, will it not be necessary so to modify the capitalist order as to transform it into some type of collectivist or cooperative order?

In Summary

In summary, it may be said that industrial society has in the past undergone constant change. At times that change has been of an evolutionary, at times of a revolutionary, nature. The modern capitalist order succeeded more primitive forms of economic society, and capitalism, since its early beginnings, has itself been in a state of constant flux.

Under capitalism, productive forces have been unleashed of a magnitude beyond the wildest dreams of past ages. The capitalist system has given rise, however, to grave evils. Society has sought to correct these evils through regulatory legislation, through some degree of public ownership, through the trade union and cooperative movements, and through various other types of voluntary action.

Critics of present-day social evils have urged the end of capitalism and the inauguration of a cooperative society under which the principal industries of the country would be owned by the community and run not for private profit, but for social gain.

The two principal movements directed toward fundamental change are the socialist and the communist movements. While both would substitute another social order, they differ radically.

In a democratic country, Socialists plan to effect the change from the profit system to socialism through peaceful and demo-

cratic political action. Communists, believing that capitalists would not give up their power without an open struggle, usually lay their plans for the conquest of political and economic power through undemocratic maneuvers by "the militant minority," through intimidation and force.

Socialists work through democratically controlled political parties, and seek to adapt their political and social programs to the needs and aspirations of their respective nations, as part of a world community. Communists work through rigidly disciplined, centrally directed, national Communist parties, which usually receive constant directions from Moscow. They regard any action as justifiable, however contrary to accepted ethical codes, which promises to advance the prestige and power of world communism, and particularly of the Soviet Union.

Socialists seek to preserve and extend political democracy during the change-over from capitalism to socialism. Communists seek to establish during that period a dictatorship of the ruling group of the Communist party. Socialists, moreover, unlike Communists, oppose any extension of state power which is shown to be at the expense of a free society and the development of the individual. They provide for greater scope than do the Communists for voluntary cooperative undertakings and for private enterprise especially in the field of agriculture.

Advocates of capitalism differ both from Socialists and Communists in their belief that individual initiative and social progress can best be stimulated through the maintenance of the major sector of industry in private hands and the production of goods and services with the primary aim of profit. Such advocates, however, differ among themselves in numerous ways. Some favor laissez-faire capitalism, believing that the State should leave industry alone to work

out its own problems. They would abolish much of the protective legislation which has been enacted by the modern capitalistic State and retrace the course of historical development. Some would have the State interfere with industry only to the extent necessary to eliminate monopolistic practices and to assure free competitive conditions. Some would preserve the existing public services and regulations, but would oppose further extension of state power. Some, as a means of improving conditions, would strengthen voluntary co-operative movements among consumers and producers, advance the cause of labor-management cooperation, and bring pressure on owners of industry to produce increasingly with an eye to service, rather than private profit.

Others would have the State assume a much larger share in our economic life, within the framework of capitalism, with a view to tackle outstanding evils such as recurring depressions. These advocate such developments as public ownership of public utilities, government control of credit and prices, long-range planning of public works, and greatly increased social services. Whether the "mixed economy" which they favor remains primarily a capitalistic economy or gradually evolves into a predominantly socialistic economy is not a primary concern to them.

There are numerous other schools of thought among supporters of present-day or modified capitalism, but the above classifications indicate how difficult it is to set hard and fast boundaries to social systems in a dynamic industrial order.

As a result of the economic and international forces in the world today, what concept of society, what type of economic and political system, what fusion of various economic systems will win out in the titanic struggle? On the answer to this question depends the world's destiny.



THE CASE FOR THE AMERICAN SYSTEM

by

EMIL SCHRAM

President, New York Stock Exchange

WHAT DO we have here in the United States? Many people will tell you that we are now the world center of capitalism; others say that we are rapidly becoming a stronghold of labor; that employees are the most influential group in the United States and that our economy is run in their interest more than in the interest of the consumer, the investor or the business man.

We all know in a general way what we have. We live in it. We work in it. We are part of it and whatever we call the system, whatever anyone calls it, we know that this country has given, and still gives, a better life to more people than any other country has given in the history of the world. Economists tell us that with less than 6 percent of the world's population, we produce one-third of the world's goods. They also say that the present is an opportune time to examine our system, to explore its strength and its weakness, for we know much more definitely than we understand its nature that: (a) The American system is under strong and persistent attack by the Soviet leaders, the object of their attack being the overthrow of our economic institutions; (b) That changes in the system have been so far-reaching in the past fifteen years that its comparative strength is little appreciated by our own people and even less so by the people of other countries, such as England, France, Germany and the Scandinavian.

Whatever combination of circumstances have accounted for our remarkable economic progress, an impartial analysis will reveal that the American system is (1) highly dynamic, (2) based on free enterprise (seven-eighths private and one-eighth Government), (3) highly competitive, (4) largely self-sufficient. Its great promise for the future lies in a better understanding of the whole by the various groups within it.

First what is capitalism? It means simply the system by which a fixed sum of money, in one form or another, is set aside and used to carry out an undertaking for the purpose of producing a profit.

Seven-eighths of our system is private capitalism but it is not monopoly capitalism. The fact that we outlawed monopoly in this country, while it was permitted and even encouraged in Germany and other countries, is a key to our whole system. It is one thing that makes the system American. Our freedom from monopoly springs

from the same idea of freedom that shaped our idea of government and our way of life. The American idea of freedom is that of a ship or an engine running free—not running wild. To us, the very idea of freedom has always meant a certain amount of control—enough control of each man so that no man or group of men may ever end the freedom of the rest. That is why our government is a system of checks and balances. It is our idea of freedom for the individual. And when we talk of "free" enterprise we use the word "free" in that sense. Russian officials—Mr. Vishinsky and the rest—and writers in Russian newspapers refer to our "monopoly capitalism." Well, it's too bad for their argument, but we just don't have it. When it started to develop at the turn of the century we set up the Sherman Anti-Trust Act. The principles of that law have been made stronger and broader by other laws whenever there was need. Those principles are at the very heart of our American system. They are part of the power lines that run from the little business of Ben Franklin's time right down to the big business of today. The fact that we outlawed monopoly is a factor of great strength in our economy.

To keep our enterprise "free" we established enough control to prevent monopoly. And we have in fact prevented it effectively, permitting it only where a monopoly is in the public interest, such as telephone service, and even there telephone competes with radio and telegraph.

I suspect that sometimes Europeans confuse mere bigness with monopoly. If Mr. Vishinsky has any doubt on that point I'd like to have him tell some Chrysler or Ford dealer that General Motors has a monopoly of the automobile business. Such natural monopolies as are necessary we have brought under enough control to prevent them from developing monopoly power; from interfering with the businesses and freedom of other men. We have done this through Public Service Commissions and similar controls in the States and through the Interstate Commerce Commission and other controls in the federal government. From time to time when there was need we set up the Federal Trade Commission, the Federal Communications Commission, the Civil Aeronautics Board, the Securities and Exchange Commission.

Yet all these controls do not create a controlled economy. Their very purpose is to maintain the freedom of American en-

terprise. That is something which Europeans don't seem able to understand. The fact is that "free" enterprise as it exists in the United States never has existed in Europe—not even in England. Russell Porter summed this up not long ago in *The New York Times*: "Americans do not believe in absolute power," he said, "the American revolution was fought to gain freedom from absolute power, including its manifestations in economic restrictions on production and distribution, and the whole internal history of this country has centered around the struggle of the people as a whole to prevent any group—government, business or labor—from wielding too much power—consequently our economic system has remained as far from 'absolute' free enterprise as it has from 'absolute' government control."

That difference between European history and American history is important to keep in mind when you listen to any arguments about controlled or free economy. Arguments that come from across the Atlantic are based on ideas and experiences so different from ours in this country that they simply don't apply to the life we know. We talk a different language even when we use the same words.

That is why it seems to me that in order to discuss free enterprise and controlled economy we have to go back of the words and get a picture, first of all, of the system we have here and now. I've tried to sketch the rough outlines of that system. Now we need to take a look at how man lives under it.

Why do you drive the sort of automobile you have today—and why can you afford to buy it? Why do your children grow strong on foods that Europe scarcely knows? Why do you have beds and clothes that are luxuries in every other country in the world? Why are your rights as citizens respected? Why do you have freedom of speech, freedom of worship, freedom to vote as you please? Why do you have a decency of family life which the average man has never known in any other land at any time?

It's because the individual has been held in high regard. As Herbert Hoover put it recently: "Here alone is human dignity not a dream, but an accomplishment."

Our forefathers started that and each generation has continued it. But human dignity, a defenseless thing of itself, has been guarded by the most practical protector the world has known. A dynamo has been placed behind the rights of man. The sparkplug was profits, the fuel was teamwork. Under our American system profits had to provide the spark. If they hadn't, there wouldn't have been such unique progress. All of this development of the good life, which enabled our standard of

living to double every forty years, has been paid for out of profits. And most of it came from money that had been received from the sale of products before any dividends had been paid to the people who put up the capital.

But finally after all these amounts had been paid, and after taxes had been paid, the reward of good management was a dividend for the man whose money had made the whole thing possible.

This is no sob story about the poor stockholder. He knew when he put his money up in the first place that he would only get what might be left over. He never had any assurance that he'd get anything. He accepted the risk because, in his judgment, the business had a reasonable chance of making a profit. Just the same he was taking a risk. It's the willingness and the ability to take a risk that gives the American system a vitality and vigor that no government economy can possibly have.

Imagine a Central Committee planning and controlling the national economy back in the 1890's. Along comes a skinny young man who says he can make a buggy run all by itself without a horse. Can't you see the faces of the men on the board? the hands hiding smiles, the side glances? Can't you hear the chairman? "Well—hm—but, Mr. Ford, we've got plenty of horses. Who the devil wants a buggy without a horse?"

So Mr. Ford argues. He can make his buggy go faster than any horse, travel longer; it will never tire. People can do their business quicker, do more business, carry bigger loads further. If the Central Committee will only build him a little plant where he can start—just a little plant to start.

"It's no use talking, Mr. Ford. Why the party'd kick us out of office if we let you use Government money on a fool thing like that! Just suppose you could do what you say; you'd ruin all the horse traders, harness and carriage makers, and the blacksmiths. Mass unemployment! Your gadget will never work, and nobody'd want it if it did. Money down a rat hole!"

But Mr. Ford didn't have to talk to a government board. He was living under a system of free enterprise, and he found people who would take the risk. Risk of failure, of course. A government board can't afford that sort of risk, but free men can. And all the modern miracle of industry has been wrought by men who risked their capital in the hope of profit. Risked and lost, and risked and lost again, until at last they began to win.

It's because our form of free enterprise permitted a man to take a risk—protected him in the right to take a risk—that we made such unparalleled progress. It is why America became the land of opportunity

because every man who risked his capital created security for other men. The capital could do nothing alone. Every venture created some jobs for some time, even if it failed. It made use of that active power of teamwork, which the American laborer has developed to a greater degree than any other. Every venture that succeeded created more jobs permanently.

In contrast with the dynamic character of the American system, socialism is static. Lacking personal incentive the members of a socialistic community devour the resources of a country instead of producing new wealth to add to those resources. Only under the continued lash of a dominant government will the worker in a socialist economy produce even a sizable fraction of the output of an American worker. An important reason lies in the fact that the American workers' tools represent the cumulative effect of several generations of free enterprise. Every few years the production of the American worker saved from consumption, is invested in better tools, thus establishing a constructive cycle.

At this moment virtually all of the socialist and communist economies of the world are attempting to secure efficient tools. American machines and machine tools are first on their list of essential imports. Without our products of free enterprise the other systems would stand little or no chance of producing enough to meet the basic needs of their people.

Critics of the American system wisely refrain from denying our economic accomplishment. They do criticize us unmercifully in the realm of artistic and intellectual life and their complaints often fall on fertile ground. Everyone of us, of course, is occasionally irritated by the demands which the swift pace makes upon us. Business men feel the impact of a dynamic life, as do artists, writers, philosophers and editors. We are attracted by the contemplative life but instinctively most of our people know that such a life is not for us. That in the modern world there are the many who work and the few who understand; that the first group could exist without the second, the second would perish without the first.

Let us see what the American system does offer in the fields of education, art, literature, science and philosophy. Progress in providing educational opportunities is revealed by the number of high school graduates which is growing about sixteen times as fast as the population. Our colleges are hard pressed since the war to accommodate those who are able to pay for a higher education. It can be said that in no other country, nor under any other system, have so many people received the opportunity to learn.

If they wish to market their learning

in the fields of art, philosophy, science or religion they stand an excellent chance of success. They can pursue the arts while holding down an industrial or business job and not be too concerned over what their employer thinks of their ideas. There are plenty of employers. There is no member of a *Politburo* to lecture them on the state of their work. No Central Committee publishing a Culture and Life for "the purpose of promoting criticism of deficiencies in ideological work."

Creative workers may seek customers among individuals, trade unions, churches or corporations. Free from control by the government, the church, business, or other established institutions they can accept support wherever they find it.

No community has ever given wider latitude to the critics of its institutions than has the United States. Under private enterprise not only critics but rebels and dissenters of all sorts do not find great difficulty in making a living. It is even possible to make a living by producing work that affronts the good taste of the majority of the members of the community. There are nearly four million enterprises, not including the six million engaged in agriculture. The very multitude of employers provides security.

Of the truth of the above there can be little doubt. The Socialists admit it but say that private enterprise allows us too much liberty. Are they right? It is up to us to prove that they are wrong for we are in a war of ideas and ideologies. We can prove it by making the American system operate more steadily and more efficiently than any other in the world.

We now have the kind of economic leadership that is good at increasing production and willing to increase imports. This should result in rapid economic progress and such progress reduces the danger of attack by Russia as it increases our potential military power.

Labor, our largest and most effective single group, has much to gain from policies to stimulate economic progress. I believe it is highly probable that labor will discover its stake in free enterprise and support policies that foster it. Some labor leaders are doing this now and others will follow.

Well that's our system—that's the way it works. If it had remained where it was twenty-five years ago the American system might not be able to meet today's challenge. The motor car of 1924 could not compete with that of 1949. Our system had, and still has, power of growth, power of renewing its own vigor; it is always changing. But the ideas and ideals that gave it birth in the very beginning of our history are the ideas and ideals that give it power today.

ADDENDUM—HOW ECONOMIC FREEDOM WORKS

by

WILLIAM J. CASEY

Chairman, Board of Editors, Research Institute of America

ACCORDING TO PAUL HOFFMAN, one of the goals of the Marshall Plan is to increase the per capita annual income of the people of Europe from \$320 to \$500. The actual per capita annual income of the United States is more than \$1300—better than two and a half times the goal and better than four times the reality.

Those who want to disparage the economic achievement of America attribute it to superior resources. The fact is that we have only 5 percent of the potential water-power for the generation of electricity, only 7 percent of the forests, none of natural rubber, nickel or manganese.

No, it's not superior resources. It's something in the character of the people, in the ingenuity and energy applied, in the will and the incentive to do, in the organization of economic activity.

We have one eighth of the world's land geologically favorable for the discovery of petroleum. Yet we have discovered about two thirds of all the oil found in the world today. Why? Largely because there is incentive to risk between \$100,000 and \$250,000 at 12 to 1 odds drilling each oil well, and to equip each worker in the oil industry with \$38,453 worth of tools.

The American working man has more than doubled his real income over the last 40 years, while reducing his work week from 57 to 40 hours. This has been possible because output per man hour has been more than doubled. An increase in investment per worker from less than \$2000 to more than \$6000 has been the biggest factor in raising output per man hour. That's how capitalism raises living standards—the investment of savings to provide tools and mechanization produces an increase in output which is passed along to the public in higher wages or lower prices.

The source of our economic strength and prosperity is three and a half million businesses and about six million farms. That's over nine million points at which new ideas may be born, new experiments made, new additions to our standard of living developed.

When new projects have to be authorized at some central point, ideas die, initiative becomes dull and action clogs up. Ours is an open society. A man can act on his own judgment. He either builds to the order of his customer or he builds or buys in reliance on his judgment as to what the public wants. He stands or falls on whether

he pleases other people with what he does. His activity is generated and controlled by voluntary contract between free men, not by decree of a functionnaire backed up by the force of government. We keep away from unproductive overhead living on the rest of the community, and get things done much more quickly and surely by man-to-man agreements, thousands every day, decentralized all over the country.

The public votes every day on which business units serve them best. We express our choice on each commodity and economic service separately and precisely at the time we are interested in that specific item.

This economic democracy is a much more accurate thing than our political democracy, where we express our choice directly once every two years, and then must try to reflect our preferences on foreign and military policy, civil rights, government administration and domestic economic policy with one single choice. Theoretical collectivists would try to force all our economic choices through the ballot box every two years.

Under capitalism, some people get rich and some companies get big. People and companies receive only what other people freely pay them, and the way they get rich and grow big is by making something the broad masses of people want, and selling it at a price they can pay. That's the history of Henry Ford and General Electric, of the radio and the ball point pen.

Modern technology calls for large-scale operation. Big corporations unite a group of skilled people and the savings of the public, through stock ownership and loans from banks and insurance companies, to do a job for us as consumers. We control these institutions in many ways—government, competitors, customers, labor unions, stockholders and investors. Management must meet and satisfy the demands of all of these groups.

The existence of a large number of business opportunities and potential employers is fundamental to the assurance of personal freedom. As Lenin put it, the ration book is more powerful than the guillotine. A worker who spent his life in the railroad industry and is blacklisted by the nationalized railroad board is in a very difficult position. He may suffer great infringement on his personal dignity, rather than risk losing his job. Under capitalism, there are

many possible employers. That protects the individual from any one of them pushing too far. Critics, dissenters and rebels find a way to make a living. Power is dispersed between thousands of business leaders, government leaders, labor leaders, church leaders—and there's room for any individual to earn a place.

More than 200,000 people go into business for themselves in the average year. One out of every five Americans is self-employed as a professional man, a farmer or a business man. Between 1910 and 1940, common laborers dropped from 38 percent of the labor force to 25.9 percent, professional persons increased from 4.4 percent to 6.5 percent and white-collar workers from 10.2 percent to 17.2 percent. The number of engineers, physicists, chemists, artists, editors, musicians and medical men has increased very much faster than the rest of the working population.

Economic opportunity and independence reflects itself in property ownership, with 20 million, about half of our families, owning their own homes, 36 million people owning life insurance, 20 million having savings accounts and about 9 million owning stock in business corporations.

Marx, a hundred years ago, predicted that capitalism would fall because the worker would "sink deeper and deeper" into increasing misery and pauperism. We have seen that the worker has steadily increased his income and his leisure time. The open character of the American system is strikingly demonstrated by the growth of the trade union movement, frequently against bitter opposition. We have the strongest free trade unions in the world. We know that free trade unions have a major role in representing workers against free business institutions in a capitalist society. The role of trade unions vis-a-vis the government in a socialist society is by no means clear.

The employee of the capitalist is protected in the right to bargain collectively, to strike, to picket peacefully, to have his grievances heard. Unemployment and old age benefits, workmen's compensation payments, public relief and employer pensions run about 70 percent more than total dividend payments by all American corporations. Workers and low income groups are steadily improving their share in the fruits of industry. In 1940, physical output per

man hour had increased 6 times over the level in 1840, but hourly earnings had increased 8 times.

Most important of all, as a result of and as a contributor to our free economy, is the American spirit. The opportunity to back individual judgment on what people want and on how to get things done—the chance to participate in policy as owners, customers and members of unions, as well as voters—these have generated a confidence, a capacity for decision and action, a vigor, which are fundamental to our political, social and military, as well as economic, achievements.

There's still much to be done. The Twentieth Century Fund's survey of "America's Needs and Resources" spells out new peaks of material prosperity within our reach. There's still much to be done in stabilizing the ups and downs of our economic system. For a substantial portion of the population, income levels, housing and medical care are still inadequate. We must find ways to improve the social and economic status of the Negro and other minority groups.

All these goals can be achieved within the framework of the capitalist system. In Europe, the working classes and the trade union movement have largely accepted the class struggle approach to life, and are out to destroy private capitalism. In America, most people still consider themselves middle class and don't want to fight a class war. Many trade union leaders want to move away from a philosophy and policy of conflict toward one of constructive collaboration. In the ranks of management, there is a significant movement to find better human relations, to give employees knowledge of and participation in the plans and problems of their company, to learn what satisfactions employees want and to give them, to anticipate and remove sources of friction. The Conservative party, in England, has adopted a platform of "humanizing" rather than "nationalizing" industry.

Our continued progress may depend on how successfully American employers and trade unions can get together on humanizing the industrial system and on developing government, business and labor policies which promote rather than stifle the working of the free society which we now enjoy.



I AM GLAD you are giving space to a frank discussion of the policies of the political parties in this country. With you we believe that the particular view one upholds is not so important as the right freely to express it. The strongest of the many links binding our two countries together is the fact that in both freedom of speech is the most cherished of our political rights.

The Right Honorable Sir (Richard) Stafford Cripps, K.C., M.P.
Chancellor of the Exchequer

ENGLAND'S NATIONALIZATION PROGRAM

by

MORGAN PHILLIPS

General Secretary, British Labour Party

WHEN, ON JULY 5, 1945, Britain returned to power a Labour government, there started in this country a peaceful social revolution unprecedented in our history or, I think, in that of any other nation in the world.

Going to the polls on that historic day, our men and women knew clearly the issues at stake. The Conservatives had pinned their hopes on the personal popularity of Winston Churchill, acknowledged by us all as a great and triumphant war leader. We, in the Labour party, having played our part in the wartime Coalition government, now looked ahead. We presented to the electorate a clear and reasoned policy for peace under the title "Let Us Face the Future."

This policy outlined the two real issues upon which the country had to pass judgment: how best could the British people get a good, secure and advancing livelihood, and how best could Britain, with other nations, lead the world to peace, security and prosperity? After six years of suffering and sacrifice, the nation was in a thoughtful frame of mind. It asked for a future very different from the outworn capitalist order of 1939 with its train of poverty and insecurity for millions of working men and women. It affirmed its faith in Labour's far-reaching program of social and economic change returning to power a Labour majority government for the first time in history.

It was a great responsibility. Everyone knew that the road ahead would be a hard one. Indeed, I think it is fair to say, that many of our Conservative opponents welcomed a Labour majority believing that the difficulties to be overcome would be trying enough to break any government.

Every man and woman and all our economic resources had been mobilized in the long and bitter struggle against the Axis powers. Our bombed and blasted cities, our worn out industrial plant and machinery, impoverished us but left us resolute. We had to rebuild our national life—not the same life that we had lived in 1939 but a new social and economic order based on Labour's plan for peace and prosperity.

That was the immense task set before the Labour government. Clearly the basic need was for production—production for peace. Our immense war industries had to be switched over to civilian production and millions of men and women in the services had to be transferred to peacetime jobs. This great switch-over has involved more than six million men and women and has been accomplished with a smoothness which perhaps only those who recall the bitter industrial strife of the years after 1918 fully appreciate. In the three years after this World War, only 8¼ million working days have been lost through industrial disputes. In the three years following 1918 the number of days lost was 149 million.

Like the United States, Britain in the years between the wars suffered from the running sore of unemployment. For well over 1,000,000 of our people to be unemployed had come to be accepted as an almost permanent feature of our national life. The Labour party promised the electorate job security, and that there would be work for all those who wanted it. That promise has been kept. At mid-June, 1948, there were fewer than 274,000 unemployed in this country and a high proportion of these were in process of transfer from one

job to another. It is significant that against this figure of 274,000 unemployed, there were at the same moment 490,000 unfilled vacancies at the official employment exchanges.

Like millions of my countrymen, I remember the position in November, 1921, three years after the end of World War I. Then no less than 1,792,000 workers were known to be unemployed and a further 252,000 were on short time. In the same month nearly a million people were in receipt of Poor Law Relief, including a large number who had exhausted their right to unemployment benefit.

Most tragic of all in this story of inter-war unemployment were Britain's depressed areas—the big industrial areas of South Wales, Scotland, Durham and Tyneside and West Cumberland, all of them dependent upon a few heavy industries.

From all these areas life just drained away because their industries—coal mining, shipbuilding, iron and steel—were the first to suffer at each recurring slump and there was no alternative employment available.

Now renamed Development Areas under the Distribution of Industry Act of 1945, a balanced economic life is being built up in these districts. Today the heavy industries are providing plenty of employment but we are also introducing new light industries to prevent a temporary depression from bringing misery and starvation to an entire area as it did in the past. Unemployment in these areas has fallen to new low level records and there is new life and new hope in what were once the black spots of Britain's industrial development.

We, in the Labour party, have always believed in the principle of national ownership of our great basic industries. I, myself, have never been able to see how a government can lastingly provide job security for its people and a national policy for economic efficiency and expansion unless its key industries are under public ownership and so far as this country is concerned the state of depression and decay into which our industry declined in the inter-war years gives truth to this contention.

This conception of public ownership is not new in the United Kingdom. Nor is it a monopoly of the Labour party. It was a Conservative government that nationalized the telephones and British Broadcasting. It was a Conservative government that more than semi-nationalized electrical generation in 1926.

Our program for public ownership presented to the electorate in 1945 was a practical one designed to make our nation the master and not the servant of its material resources. And it is in accordance with our electoral mandate that we have transferred

certain industries and services vital to the life of the nation from private to public ownership. With the exception of iron and steel which will be dealt with in the 1948-49 Parliament, our industrial program has now been achieved.

We started with the Bank of England because, in our view, sound banking is of such public concern that the Central Bank should have its policy directed solely by the state. Then came coal, civil aviation, inland transport, gas and electricity supply and overseas telecommunications.

I will quote the example of coal because it was the first industry to come under public ownership and it is an industry basic to our whole recovery program. Before nationalization, industrial relations in this industry were the worst in this country. Years of neglect and mismanagement had reduced the industry to a parlous condition; generations of bitterness had led to a complete lack of confidence between masters and men and sapped the morale of the mining community. Production had fallen from 287 million tons in 1913 to 227 million tons in 1938 and only 183 million in 1945.

With the advent of a Labour government, the tide turned and in 1946 production rose to 190 million tons. The rise continued in 1947—the first year under public ownership—to 196.5 million tons and this year we are well on the way towards a target of 211 tons for 1948. By the end of June over 106 million tons had been secured from both deep mines and open cast sites. An even greater achievement has been to check falling manpower. The number of mine workers had fallen from over a million in 1913 to 692,000 at the end of 1946. In July, 1948, there were 725,000 miners at work, now members of a decently paid national service and at long last recognized as the nation's key industrial workers.

We do not claim to have found perfection; inevitably the administration of nationalized industries is bound to suffer a great many growing pains before we can claim to have discovered the perfect methods of control. I would be the first to admit that mistakes and miscalculations have been made but I am also more than ever convinced that this great plan for the public ownership of our basic industries and services will bring a new and happier industrial order into our national life.

This program of nationalization must be seen in perspective. Even when, at the end of our present Parliament, our program has been completed, far the greater part of our industry will still be privately owned and run on private enterprise lines. We shall not quarrel with private enterprise so long as it remains *enterprising*. On the contrary, we are doing everything possible to assist and encourage private industry in the drive for greater production and we

have, at every level, sought the assistance and cooperation of both employers and workers in working out those parts of the national plan which directly affect them.

Indeed, public and private industry are working together in a magnificent response to the call for higher production. A growing proportion of what we produce is, and must be, sent abroad to pay for essential imports of food and raw materials. We are well on the way towards the achievement of our immediate export target of 150 percent of the 1938 volume by the end of this year (1948) and have already realized our target of 140 percent of the 1938 volume set for this summer. Our July exports were by value (£145,600,000) the highest in all our trading history and in quantity the highest for 19 years. We have still a long way to go, not only in closing the gap in the balance of our overseas payments but in increasing the production of goods so badly needed by our people at home. I am confident that with the aid now so generously made available to us under the European Recovery Program, Britain will win through to economic independence and play her full part in the recovery of Europe.

Do not let me give the impression that in concentrating upon this great industrial drive, we are forgetting that essential to any sound recovery program—a flourishing and efficient agriculture. Today it is still one of our biggest industries and more than a million Britons look to the land for their livelihood. To restore to Britain a happy and prosperous agricultural industry has been a first aim of the Labour government and already remarkable results have been achieved.

During the years of Conservative rule between the wars, British farming was an unhappy story of neglect. Hundreds of thousands of farmers and farm workers left the land to seek employment in the big cities, some 2½ million acres of arable land were lost to cultivation and many thousands of our farms declined into a derelict condition.

With the outbreak of war, agriculture became Britain's fourth line of defense and the proportion of our food grown at home was raised from only a third to more than a half. Since the war, agriculture has moved up to the front line in the battle to close the gap in our overseas balance of payments. Our target is for an increase in our annual output of farm produce by as much as £100,000,000 by the winter of 1951-52—an increase of 50 percent over prewar output and 15 percent over the wartime peak of 1943-44.

By its great Agriculture Act of 1947, the Labour government has not only created the conditions necessary to achieve this target but, I believe, laid the foundations

of a new era in British agriculture. Resting on the twin pillars of stability and efficiency, the Act aims at fulfilling our pledge to create "a prosperous and efficient agricultural industry ensuring a fair return for the farmer and farm worker without excessive prices to the consumer."

Stability is provided through a system of guaranteed prices and assured markets for the main farm products. Crop prices are fixed eighteen months ahead of the harvests so that farmers know what they will get for their cereals, potatoes and sugar beet well before the crops are sown. Minimum prices for fat livestock, milk and eggs are known four years in advance. In return for this measure of stability (something our farmers have never before enjoyed in time of peace) we ask landowners, farmers and farm workers to observe certain minimum standards of estate management and good husbandry.

Efficient farming demands that farmers have at their disposal a knowledge of the most up-to-date methods. The Labour government is extending research into all branches of farming practice and through a National Agriculture Advisory Service, set up in November 1946, is providing a valuable link between scientist and farmer.

Like the miners, farm workers are enjoying the enhanced status they deserve. Wages, which averaged only 35 shillings a week before the war, now stand at a minimum of £4.10s.0. Miners and agricultural workers are top priority in the housing drive and we are hard at work on great new schemes to bring piped water supplies and other amenities to our rural communities so that at last our country folk will have a fair deal and a secure future.

Even by raising our agricultural industry to the highest level of efficiency, Britain must remain largely dependent upon overseas supplies to feed her people. Indeed, to ensure that all our people have enough food to maintain their health and energies has been a task basic to our whole recovery program. We have not deviated from our declared policy of fair shares for all so long as essential goods remain in short supply and our rationing system remains the envy of all Europe. Through subsidies and the retention of price controls we have kept the cost of basic foods steady and within the reach of all classes of the community, and by our priority milk and welfare foods scheme we have provided that little extra needed by our mothers and children.

Health statistics have proved the wisdom of our policy. Our infant and maternal mortality rates have fallen to new low records, and our school children have never been stronger and healthier. Certainly, the food situation is not easy, but I reaffirm that there will be no "privilege" about its

Distribution while the Labour government remains in power.

So far as we, in the Labour party, are concerned there is no question of "control for control's sake," but so long as shortages remain we shall preserve those controls essential to safeguard the community interest. Many controls have, in fact, been abolished or relaxed in recent months when increased supplies rendered them no longer necessary.

Second only to a sound food policy has been the need for a building program unprecedented in our history. To rehouse our people was a task to make or break any government. With about one home in every three damaged or totally destroyed by enemy bombardment and the legacy of our city and rural slums still with us, the clamor for new homes had to be met. Labour's housing record has, I think, stood the test. Of course, we are not satisfied; that we can never be while there is a single family in want of a home. But the government is proud of the fact that, despite all our shortages of such essential building materials as steel and timber, more houses have been built in postwar Britain than in the rest of Europe put together.

Since 1945, we have built a total of 310,530 new permanent houses and 153,171 of a prefabricated and more temporary type. With the help of adaptation and conversion of existing buildings, we have already rehoused nearly 800,000 families.

Labour's plan is not only to build new houses but new towns. Our New Towns Act is one of the most courageous acts passed by any government providing as it does for the creation of new towns for our people—modern, planned throughout, containing every up-to-date amenity and designed to harmonize with the surrounding countryside. Work on two of these new towns, Peterlee and Aycliffe, designed specially for our mining communities is to start immediately. Plans for five others are temporarily in abeyance until our immediate economic difficulties have been overcome. All these new towns are to be built by government financed public corporations and will provide a long needed solution to the dreadful overcrowding in our great cities.

Haphazard building of homes and factories in the past has meant a sprawling ribbon development along our main roads, ugly shacks defacing our countryside and the waste of good agricultural land. We have passed a Town and Country Planning Act to put an end to all this and to ensure that in future all the land in the country is used in the best interests of the community as a whole—new houses in the right place, the preservation of green belts, the provision of open spaces in overcrowded areas, and the reconstruction of

old towns. I think it is not too much to say that in this act lies the power to change the face of Britain to the immeasurable benefit of her citizens.

We believe a decent home in pleasant surroundings secure against the extremes of poverty, to be the birthright of every family. For over 50 years, Britain's Labour party has stood for the principle of "Work or Maintenance" and largely due to pressure from the ever-growing number of Labour representatives in the House of Commons some system of insurance was gradually built up during the course of the present century.

But its faults and shortcomings were obvious. Benefits were too low, the period of payment too short and, worst of all, millions were excluded from insurance altogether. As a result, unemployment, sickness or accident meant acute poverty with its inevitable train of unhappiness for millions of working-class homes and old age meant dependence upon the charity of relatives or friends or, in the last resort, the dreaded stigma of the workhouse.

That was why the Labour party promised the electorate in 1945 to provide proper social security for all—a promise fully implemented on July 5, 1948, when Labour's great, all-embracing scheme of social insurance came fully into operation. Six important acts of Parliament have opened six new chapters in Britain's social history, between them providing security "from the cradle to the grave" for every one of us.

I have no space here to mention the detailed provisions made in these six acts, but I will outline the broad scope of each. First, and benefiting every one of us, is the new National Insurance Act providing an all-embracing system of insurance for every person in the country over school-leaving age. Under this act, benefits during unemployment or sickness are paid at the rate of 26 shillings a week for a single man or woman and 42 shillings a week for a man and wife. The act also provides for maternity and widows benefits and death grants on a far more generous scale than under the old system. Old age pensions, too, have been more than doubled, thus relieving many old people from the dread of forced dependence upon their relatives.

But under any scheme there will be those who cannot get all the help they need. In the past, destitution has been a charge upon local taxpayers; it has meant "going on the parish." Labour's National Assistance Act has now swept away the remains of the ancient Poor Relief Act, passed in Queen Elizabeth's reign nearly 350 years ago. To assist those in need is now a national charge and the act provides especially for elderly folk by making it the duty of local authorities to provide real homelike

accommodations for them where they will be paying guests, proud and independent.

Few of us live our lives without some period of ill health and in the past this has too often meant a time of poverty for the whole family. Health insurance in the past only covered the worker; should his wife or children fall ill there were bills to pay. The National Health Act has abolished the fear of doctors' bills and other expenses in times of illness. It makes available to every man, woman and child, free medical attention, hospital and specialist services, surgical appliances and drugs. It is a great scheme and it is already in operation. But it is not yet complete. One vitally important feature of the scheme—the health center—can only be realized when building conditions allow.

For years, the Labour and Trade Union Movement have criticized the shortcomings and injustices of the old Workmen's Compensation and the new Industrial Injuries Act has been hailed as the achievement at long last of a fair deal for those disabled by accident at work or by injury or disease due to the nature of their employment.

Last, but certainly not least, I would like to mention two acts specially concerned with the welfare of our children. The Family Allowances Act passed by the Coalition government and brought into operation by the Labour government in August, 1946, allows for the payment of 5 shillings for each child in the family except the first regardless of the income of the parents. Today three million families are drawing these allowances for well over 4,000,000 children at a cost of £60,000,000 a year. The second is Labour's Children Act which provides a comprehensive and human service for children deprived of a normal home life—not only our orphans but those children whose parents are incapable of giving them the care they need. In recent years our public conscience has been shocked by revelations of the conditions in which some of these children have been growing up. The act ensures proper supervision and inspection and makes it a duty for every local authority to appoint a children's committee and a children's officer responsible for the welfare of these children.

Do not let me give an impression that the Labour government is unaware of the high cost of all these great services. Far from it. In 1945, we said that only an efficient and prosperous nation could afford these things and it is constantly emphasized to our people that social benefits have to be paid for somehow, and that, in the end, only full employment and an industrial effort raised to the highest productive level can guarantee social security for all.

Hand in hand with bringing into operation this comprehensive social security scheme, the Labour government is pushing

ahead with the tremendous task of bringing into being the extensive reforms contained in the Education Act of 1944, a great measure passed by our wartime Coalition government designed to reorganize our entire educational system. It is a task entered into with enthusiasm by the Labour party. For years before the war we decried a system whereby 90 percent of our children were thrown on to a competitive labour market at the tender age of 14, equipped only with an elementary education.

Naturally an extensive measure of reform, estimated to cost at least £1,000,000,000 and entailing an increase of over 70,000 teachers compared to our prewar establishment, will take many years to accomplish in full. But our first bold step, much criticized by our opponents, was taken in April, 1947, when we raised the school-leaving age to 15 thus ensuring four years of secondary education for every child. By the rapid establishment of emergency training colleges and by extending the facilities in our permanent training colleges, we have more than doubled the number of students in training for teaching and with the help of prefabricated class rooms we are doing all we can to see that children of today have the fair start in life so often denied in the past.

The Labour party has always stood firmly for the right of every child to an education according to their ability and irrespective of the financial means of their parents. In the past three years, by more than doubling the number of state scholarships, by introducing technical scholarships for those already in employment who have shown the ability to benefit from a university course and by making available additional financial assistance to all those who have won university scholarships or exhibitions, we have done much to broaden the road to our universities. There is still a long way to go—we need more nursery schools, new county colleges for the part-time education of young people and thousands of new and well equipped schools—but I think it is fair to say that at long last in our history the education of our people is recognized as a vital cornerstone in the life of a democratic nation.

But there is a far wider field for development if our people are to be given the opportunity for a full and satisfying life. The job of the Labour government is not only to extend educational facilities in the moral sense of our schools and colleges but to provide those facilities for recreation which will enable our people to enjoy to the full their leisure hours.

Such facilities have been sadly lacking in the past for the working man and his family. Many of our big industrial cities are without a theater. Playing fields and swimming pools are quite inadequate for our population.

"We want to change all this by providing new public facilities for recreation and culture, and already a significant step has been taken in giving county, district and borough local authorities general powers under the Local Government Act of 1948 to provide any entertainment or leisure facilities, including municipal theaters and orchestras.

The Labour party has always believed that art and culture belong to the people, and not to the privileged few. That is why we are steadily increasing the grant made by the government to the Arts Council, a body set up in wartime to promote art among the people. Gallant work has been done by this body in taking first-rate theater productions into mining villages and country towns; in bringing art exhibitions to our great industrial cities; and in the promotion of thousands of concerts up and down the country. For the first time in their lives, thousands of our people have tasted the joys of the living theater, art and music. Now the government has given further encouragement to this valuable work by taking over for the Council London's famous Covent Garden Opera House. Another bold step has been the grant of £1,000,000 towards the building of a national theater on the South Bank of the Thames when building conditions allow.

I hope this brief outline has been sufficient to give at least some idea of the vast changes undertaken in Britain during the last three years. Naturally there are many

who do not agree with all we have done but few, I think, would deny that we have achieved a far-reaching and planned program of economic and social reform. The question we must constantly ask ourselves is: How far has this program succeeded in terms of the well-being of our people?

I believe profoundly that these measures are laying the foundation to a new and more prosperous Britain—a Britain more truly democratic than ever before in her history where men and women can live their lives free from the fears of insecurity, oppression or want. We are building a system where government ownership and enterprise will work side by side with private ownership and enterprise towards the common goal of national prosperity. Our aim is to show how substantial planned economic change for the common good, achieved by democratic methods, is not only compatible with full individual freedom but can bring new outlets for individual enterprise into our national life. Our opponents would argue that this can't be done. We believe that already this great experiment is succeeding and, indeed, that only in a planned society can true individual freedom exist at all.

That is why today the Labour party faces the future with quiet confidence—confidence in ourselves and in our friends. We believe in Britain and we believe that Britain is proving her right to leadership in a distraught and divided world.

CONSERVATISM AND HUMAN ASPIRATIONS

by

R. A. BUTLER, M.P.

Minister of Education in Churchill's Wartime Cabinet

BRITISH CONSERVATISM is essentially British. International as it may be in some of its aspects, it is not for export. We hold out the hand of friendship to men and women of all nations who share our faith in Christian civilization, in the essential freedoms and in the democratic way of government. But we do not seek to force our policy down the throats of other nations nor do we seek international alliances with other parties elsewhere upon the basis of a rigid dogma.

Conservatism is a way of life. We uphold the institutions of our country as a safeguard of individual liberty and the expression of moral authority which binds together a civilized community. We take pride in the historical achievements of the British nation and especially in the development of the Empire and in the part we

have played in upholding right dealing in international affairs.

But above all, British Conservatism stands for the many-sidedness of human life and activity. We believe that one of the greatest dangers in the world today is that overcentralization will leave nothing between the omnipotent state and the defenseless individual. If that time comes, the individual will surely go under. Already the first state, the classifying and docketing, the trimming and curbing and the leveling down is manifest.

Conservative Ideals

We stand for opportunity for the individual. We wish to develop personality not suppress it. We shall level up opportunity not level down achievement. Every man,

woman and child is a member of a community, indeed of many communities. In the forefront is the family and the home and these, it is our object to sustain and strengthen. No state, however wise and paternal, can take the place of the family home. Second, we insist upon the varied life of the neighborhood community, the town or village where the home is situated. We want local affairs to be locally administered by men and women who are directly elected by their neighbors, who are responsible to their fellow citizens and are free to mold the community according to its own wishes and not according to a detailed and uniform pattern laid down by remote authority. Third, we see in Britain, as in the U. S., a vast array of voluntary organizations for sport, for social activities, for mutual protection, catering for every class, created voluntarily, controlled democratically and providing a means of expression for every facet of individual character.

That is what I mean by the many-sidedness of human life. Britain is built on such a complex of communities. It is only in such a way that the personality of each one of us can find its fullest expression; opportunity can be matched to aptitude and power dispersed so that the individual may flourish. These things we seek to conserve and, in conserving, to improve and to adapt to modern changes.

We thus put the greatest emphasis upon things spiritual. It is the soul and mind of man which must be the first care, and it is sick today. If the spirit of man can grow and be brought into full flower, the harvest of civilization will be rich indeed and the toll worth while.

There can be dust bowls of the human spirit as well as of the land. The human spirit must be nourished. It must have its roots growing deep. It must be weeded and cared for. The dry winds of some superior force sweeping indiscriminately over the human scene will parch and dry up the rich inheritance on which we feed, and create an arid desert where flourished a community.

Opportunity

How then should we tend and nourish the plant of human endeavor. What is our plan for conservation? In British political life, there have been three plans. One says, "Leave it all alone." We say that this will allow the jungle to creep back. Another says, "Cut down everything that shows its head above the others and have everything the same size and shape so that the same treatment can be applied to everybody." We say that this will give only a partial harvest, and all the finest and strongest flowers, the best strains and the biggest yields will be lost.

We say, "Let all the plants start in the best possible conditions, let them have the same opportunity and then let all the plants be tended according to their individual needs." This means that the government must provide the right conditions and it is up to the individual to make the best use of them.

This was the thought which inspired the Education Act of 1944, in which, as the Minister responsible, I entirely reshaped the system of State education. Not only did it provide for a longer period of schooling for all children, it provided a common schooling to the age of 11 and then three parallel channels of equal status and importance along which each child could proceed according to his or her ability. Beyond that we opened the doors of the universities more widely to all those who might benefit. All children have an equal opportunity to make the best of their gifts whether they be gifts of brain or brawn.

The Basic Minimum

In the same way, we seek to equalize opportunity by providing a basic minimum of material conditions below which nobody shall fall. The wartime Coalition government provided family allowances for each child after the first in order to break the association between poverty and the size of the family. Throughout industry, wherever voluntary collective-bargaining machinery has not been successful we establish wage councils in order to prevent sweated labor. The Conservative party for more than a century has had a great tradition of factory legislation for the establishment of minimum conditions of convenience, safety and comfort for the factory employee.

It is characteristic of Conservative policy that it stresses particularly the need for a basic minimum for the family home. Our aim has never fallen short of providing a separate and worthy home for every family. After 1918, there was a woeful shortage of houses which was tackled vigorously by Conservative administrations. The number of houses built each year rose to unprecedented levels and the shortage was overcome. At the same time, Conservative governments took steps to pull down the slums and rehouse the people. For the first time in our history, a minimum standard for overcrowding was laid down and houses and flats were built to provide homes to meet this deficiency.

It was in those years, too, that provision was made to enable mothers and children to obtain milk at especially cheap rates and since then, and particularly during the war, we have developed the provision of school meals on a very large scale. This will remain a feature of our national life.

A basic minimum must care for the sick, the old and all those who are cast down

adversity. British experience in this field has excited the interest and envy of the world. Between the two wars a succession of Conservative Ministers developed a contributory system of insurance for pensions, unemployment and sickness benefit, and medical treatment for the wage-earning population. This system withstood all the strains and stresses of rapidly changing economic conditions.

During the war, at a time when our fortunes were low, but our faith high, we set about overhauling the entire structure. In those dark days, the new conception of social security which was hammered out in essentials by Conservative, Liberal and Socialist Ministers sitting together, was a beacon of hope to the nation. There has been provided under this new scheme a comprehensive system of insurance against unemployment, sickness, old age, and industrial accidents for the whole population. There are also the family allowances to which I have referred and a complete system of free medical service by general practitioners and specialists, in hospitals and at home, for all who wish to use it. For those who are still in need when they receive these benefits, there is an improved scheme of assistance according to need.

The Capitalist Economy

Such schemes cost money. Benefits require contributions just as, we believe, all rights should be matched by duties. The cost must come out of the pockets of the people. There is no outside source and no mountain of great wealth which can now be tapped afresh. The pockets of the people are filled by their own labors. Social security can, therefore, be paid for only out of the growing products of our country.

We did not embark on those schemes because we thought that we were going to live in a Socialist Commonwealth. These schemes are based now, as they were based before the war, upon the wealth produced by a capitalist economy. We have undertaken these plans having faith that the enterprise and initiative of the competitive system in British industry and trade will enable us to bear the burdens lightly.

That faith is abundantly justified by the past. It is a capitalist economy which has enabled us to achieve our present standards: the houses, the schools, the hospitals, the public buildings and the private comfort of which we are justly proud.

It is often said in Great Britain that between the two wars our country was in a period of stagnation with high unemployment and no advance in the standard of living. The facts are quite different. We were among the four countries with the highest income per head in the world. In 1937, we were four-and-a-half times better off in income per head than we were a

century previously. Between 1929 and 1938, income per head was growing more rapidly than at any time in the previous forty years. The capitalist economies in other countries have shown similar enormous advances in human welfare. But it has yet to be shown that any system not based upon competition can make as great a contribution.

The capitalist economy is based upon private property in ownership and freedom of enterprise in operation. We believe that both these aspects have intrinsic merits of their own.

A Property-Ownning Democracy

Conservatives seek to encourage the wide diffusion of ownership. Property is power. If property is diffused, power is diffused. The individual is given added protection. If property is centralized in the state, economic and political power is concentrated in too few hands. We may pass from democracy to oligarchy. We believe, therefore, in the value of a property-owning democracy. We wish to see the increased purchasing power of the individual directed to the acquisition of property, motor cars, household equipment, houses and the ownership of enterprises. Expansion of wealth and diffusion of ownership must go together.

Freedom of Enterprise

We encourage freedom of enterprise not merely as a means to greater wealth but as an aspect, and an important one, of the development of the individual. Only with freedom of enterprise can the technician, the engineer or the chemist develop his science and give full rise to his ability. Only with freedom of enterprise can the manager find full scope for his abilities. Only with freedom of enterprise does the man with an idea get his chance.

Incentives

The profit motive is not something to be scorned or sneered at. It is not a characteristic confined to owners of capital. We find it as much and indeed often more in the wages demanded as in the dividends paid. Profit is the sign of success, the hallmark of personal fulfillment in a particular sphere. But let us not forget that it is not the sole motive in industry and trade. There is often a great pride in craftsmanship, an anxiety to shoulder responsibility, and the satisfaction of good teamwork. These are all powerful motives for the individual in leisure and at work. The essential feature of industry is that it is composed of groups of individual men and women and not a series of human automata chained to machines. Therefore, industry and commerce must provide for the individual as full a satisfaction as do his leisure activities, and it is the duty of the govern-

ment to see that this is provided. The individual expects from his work a basic security which can be the foundation for adventure, fair conditions of employment, an opportunity for advancement according to ability, and interest in and a knowledge of the whole of which he is a part and a chance to make his contribution to the well-being of the enterprise in which he shares.

A Workers' Charter

The Conservative party believes that more could be done in all these directions, and in our industrial charter, which was published in 1947, we set out our attitude to this problem. It breaks new ground in the sphere of industrial thought and has received support which goes far beyond the limits of the party's membership.

Security

We propose a Workers' Charter which establishes a basic minimum of conditions. We pledged ourselves to maintain a high and stable level of employment by the use of financial weapons and by close cooperation between government and industry in the timing of capital investment. For the individual employee we propose legislation that he shall have the right to a written contract of service setting out fully the conditions of employment. We recommend that length of notice shall vary with length of service.

We have already done much to establish fair conditions of employment by assisting collective bargaining, by the factory acts and other means. All contracts made by public authorities include a clause, approved by Parliament, insisting on the observance of fair wages and conditions of labor by the contractor. We set out adequate standards for industrial welfare services.

Opportunities

We provide, in the Workers' Charter, for comprehensive systems of industrial training at all levels for those who can benefit, and a clear avenue for promotion by merit from the workshop bench to the director's desk. The new entrant will learn his job and will also learn all about the product which he handles and the enterprise and industry of which he is a member. Those who show technical ability will be able to become fully qualified in their profession. The men with administrative ability will be able to learn the art of management.

Status

In many firms there are already work committees and machinery for joint consultation based on democratic election on the workshop floors by which the employees can be kept informed of the progress of the enterprise and can bring up from their own personal knowledge valuable suggestions

for improvements. Management retains its authority but the enterprise is based on a spirit of cooperation. In Great Britain these methods were greatly extended during the war and we believe that they should become a permanent and normal feature of the industrial scene. In some firms employees are able to buy shares on special terms or to share in the profits, and we favor such schemes wherever there is a general desire for them.

These are the main provisions of the Workers' Charter. When we are returned to office we shall seek the approval of Parliament for it. We do not believe that it is a proper task for government to put its fingers deeply into the complexities of the industrial machine or to lay down in great detail how each firm should conduct its affairs. Least of all is such interference desirable in the realm of delicate human relationships. But we do believe that the government has a duty to lay down general standards in harmony with the nation's wishes, to which industry should conform. Private enterprise must bear responsibilities to the public.

We believe that this aim can be achieved by competition. We believe in competition by price and competition by service. We also believe in competition by example. It is to the power of opinion and not to the power over public contracts that we look for the fulfillment of our code of good practical industrial relations. The keynote of the Workers' Charter is that the employee is entitled to be treated as an individual personality with a defined status, given certain rights and accepting certain responsibilities.

Contrasts with Nationalization

One of the main characteristics of industry in recent decades has been the growth of very large firms. The larger the unit the more difficult it becomes for the individual in it to realize his aspirations and the more necessary it is to make special provision for this purpose. To change ownership from private to public and so make even larger units, solves none of these problems and indeed makes them more acute by increasing the cumbersome process of administration.

Nor has it been demonstrated that the unification of an industry under public ownership makes it more efficient or enables it to contribute to a greater increase in wealth and welfare. Indeed, our experience in Great Britain is the exact opposite. Since the war, no industry has made a greater contribution to our sorely needed national recovery than has the iron and steel industry. It has embarked upon a far-reaching program of capital re-equipment which is well advanced. It is experimenting boldly with new technical me-

As. Even with its existing equipment its output has steadily exceeded estimates, thanks to the close and willing cooperation between men and management.

We already have evidence that the nationalized industries do not pay their way. They become enmeshed in the trammels of an overcentralized bureaucracy. Procedure is elevated in importance above profit. Hu-

manity is at a discount. In lesser degree we see the same misdirection where the detailed commercial operations of industry are under the direction of the State. Only when the natural incentives are restored can we confidently look forward to the day when we can stand once again without the aid of our friends and realize the ideals and objectives which I have described.

Mr. Butler Replies to Mr. Phillips

IT IS AN old-established and, I think, a good custom in British politics that we do not in our speeches and writings carry overseas the disagreements on current politics which we show plainly in our own country. I have, however, been asked to comment upon Mr. Morgan Phillips' claims about the way in which the Socialist government in the United Kingdom has conducted the affairs of the country during the last three years. I notice that Mr. Morgan Phillips is silent about the disastrous fuel crisis of the winter of 1946-47. He has not mentioned Dr. Dalton's financial policy, which encouraged the inflation which his successor is fighting to curb. Nor, in dealing with unemployment between the wars, does he state that the highest figures of all were recorded during the Labour Administration of 1929-31.

He rests his claim that the Socialist government is carrying out a beneficent social revolution on two arguments: the program of nationalization and the social-security legislation.

I have already commented in my main article upon the contrast in fortunes between the privately controlled iron and steel industry and the nationalized industries. Mr. Phillips himself admits that the organization of the coal industry is far from right. Mr. Shinwell, who was responsible for the legislation, has also admitted that the Socialist party had not thought out the many intricate problems of nationalization, although they had been putting forward that policy for forty years. Moreover, the fact is, as Mr. Phillips does not mention, that the coal industry is not producing as much as it did under private enterprise, although it now has more men and more machinery but a lower output per man. In 1938, 227 million tons were produced, but in 1947 the production was only 199.7 tons (including opencast coal). Coal, we may also note, has made a negligible contribution, to only a fraction of its prewar value, to the enormous increase in the export trade to which Mr. Phillips rightly pays tribute and which is wholly the achievement of private enterprise.

If we turn to agriculture and social-

security legislation, we find Mr. Phillips makes two untenable claims: that only the Socialist party promised these schemes and that very little had been done before.

He does not mention that the guaranteed prices for farm products were started before the war by predominantly Conservative governments and were made general with the intention of establishing a post-war scheme by the Conservative Minister of Agriculture, Mr. R. S. Hudson, in the Coalition government; nor does he mention that agricultural production has been allowed to decline since 1945. He does not state that the steps which the present government has taken to implement the Education Act, for which I as Minister was responsible, were laid down when the Act was passed. His claim that "the education of our people is recognized as a vital cornerstone in the life of a democratic nation" was implicit in the Act itself when it was passed. The recreational facilities, such as playing fields and swimming pools, which he mentions are provided under a prewar act passed by a Conservative government.

I was a member of the Coalition government and held Cabinet rank. I know how the social-security schemes were shaped. As I said in my first article, the details were worked out by Ministers of all parties working side by side. When the Socialist government took office, the Family Allowances Act was on the statute book, the bills for industrial injuries and national insurance were already in draft so that the new government could introduce them in the first months of office. Discussions on the details of the Health Service were already well advanced. Moreover, all these measures were in the program of the Conservative party at the 1945 election as prominently as they were in the Socialist program. There was no division between the parties on the broad principles of these schemes, and they have been passed through Parliament with the general support of the Conservative party.

Mr. Phillips decries all previous efforts to provide insurance and health schemes. He suggests that these schemes are grudgingly provided by Liberal and Conservative

governments under pressure from the Socialist opposition. It is quite wrong to suggest, as Mr. Phillips does, that all that is good when passed by a Socialist majority is the work of the Socialist government, but all that is good when passed by a Conservative majority is the work of the Socialist opposition. Nobody who looks at the record of the Conservative party in comparable fields, such as factory legislation,

slum clearance or child welfare, to mention a few, need doubt our sincerity and eagerness for social welfare.

Until the outbreak of war, the trade unions, who provide the bulk of the support of the Socialist party, were opposed to family allowances. Indeed, I would go further and say that socialism as such has made no original contribution to thought on this side of our national life.

Mr. Phillips Replies to Mr. Butler

"When the Devil was sick, the Devil a saint would be.
When the Devil was well, the Devil a saint was he."

I AM REMINDED of this old tag when reading Mr. R. A. Butler's cleverly argued case for Britain's Conservative party. It all sounds most attractive, this finely phrased Tory New Deal for a Brave New Britain. The trouble with it all, as seen by millions of British people who lived through the years between the wars when the Tories ruled, is that it wasn't at all like that at the time.

It is no good uttering bromides like "the government must provide the right conditions" for people and industry to flourish, when the dismal record of Conservative governments in this respect is so fresh in the British people's memory. Let us inject some reality into the discussion by comparing the Conservatives' prewar achievements with their postwar promises.

In prewar Britain (and remember that the Tories held complete power, except for two short intervals, in the years between World War I and World War II) we had mass unemployment; distressed areas, those districts where the wheels of industry were silent and where men, women and children had sunk to new levels of misery and despair; a rapidly declining agriculture, with workers leaving the land in record numbers; and great social inequalities.

In Tory Britain we had never less than a million unemployed and for long periods the figure was between two and three million. I can remember so well the misery of those workless days in my own district of South Wales, where at the peak period more than half of the working population were out of work. I'm afraid the fine Tory phrases of today ring very hollowly in the ears of millions of Britain's working people, who see how, under the Labour government, unemployment is practically nonexistent, and certainly lower than it has been before in peacetime.

Consider also the social services. Here again the Conservatives are lavish with their promises, and Mr. Butler talks about the need for a basic minimum. But we know only too well that the social services which Labour has built up would be

gravely threatened if the Tories were returned to power. The Labour government has introduced a social-security scheme which is perhaps the most comprehensive in the world. But Sir John Anderson, who speaks for the Tories on financial affairs, told the House of Commons that Labour "acted too hastily" in introducing family allowances, increasing the old-age pensions, and putting into effect the national insurance scheme, the Health Service, and educational reforms.

Sir John's attitude, which belies the pretty phrases of Mr. Butler, is certainly all of a piece with what the Tories did after World War I. Then the Conservative-dominated government slashed the social services mercilessly, and it was not until a majority Labour government was returned that they were brought up to satisfactory level. Can you wonder, then, that when the Tories pose as the champions of the social services, so many British people are inclined to be a little skeptical?

Then education. It is perfectly true that it was Mr. Butler himself, as a member of the wartime Coalition government, who introduced the 1944 Education Act. That is a measure of far-reaching importance and Mr. Butler himself has admitted what a great part his Socialist colleagues and present Home Secretary, Mr. Chuter Ede, played in piloting this bill through the House of Commons.

We cannot help remembering, also, that a very enlightened education act—the Fisher Act—was scrapped by the Tories after World War I. Maybe history doesn't repeat itself quite so exactly, but again you cannot blame the British people if they do not quite see the Tories as the ardent champions of educational reform. Anyhow, the Labour government has put the 1944 Education Act fully into effect, even to the extent of increasing the school-leaving age in the face of many protests from Conservative friends.

The Labour government, too, has doubled the number of state scholarships which enable poor children to get to the uni-

rsities, and all round we have put into effect a system which will give real educational opportunity to all children.

The Tory record, too, on agriculture is sorry one. When the Conservatives were in power, hundreds of thousands of farm- and farm workers left the land; some million acres of arable land were lost to cultivation; and thousands of our farms declined into a derelict condition. Today, with Labour in power, a great transformation has occurred. Farm workers' wages have gone up from 35s. a week to £4 10s., and farmers are given fair returns and a guaranteed market for their produce. Even conservative-minded farmers will admit that the Labour government has done more for agriculture in three years than Conservative governments did in thirty.

Britain's postwar housing record is the best in Europe and we are building houses at a far faster rate than was achieved by the Conservatives in the three years after World War I. Already we have provided 100,000 new homes, which was the wartime Coalition government's own target. This shows that we have built houses at a rate many times faster than was achieved in the three years after World War I.

Labour Britain, too, is doing well in the field of production. Already we have pushed up output to ten percent *above* the prewar level—a figure which has not been reached by any other European country which fought in the war—while exports alone have soared to the remarkable figure of nearly 50 percent *above* the prewar level. I think these figures conclusively prove that the Labour government is doing a good production job and that the idea that British industry is "paralyzed" or "caddened with bureaucracy" is a figment of the Tory imagination.

However, we do agree that our production must go higher still and that's why the Labour government is pushing ahead with its policy of nationalization. In prewar days, Britain's capitalists allowed large sectors of industry to become technically inefficient and out-of-date, and output fell alarmingly. A typical instance of this was the coal industry, and when Labour took over in 1945 there was no alternative to nationalization. The Reid Report, which was prepared by nonparty technical experts, showed this conclusively. Since the

state took over the mines, output has gone up steadily and it will go up still further when we have got all the mechanical equipment and additional manpower we need. Already, new recruits are going into the mines at an encouraging rate. The Tories themselves have admitted that nationalization was the only answer by stating they would not denationalize the mines if they won the next general election.

The iron and steel industry needs much re-equipping and overhauling before it can compete on level terms with the rest of the world. This implies considerable assistance from the government. It is true that in recent years steel output has gone up, and that our steel workers have done wonders with inefficient equipment, but our production still lags badly behind that of the U. S. steel industry. In prewar days our steel industry was literally a cartel in private hands. This obviously has dangerous possibilities for any nation. For these compelling reasons the government is determined that the industry should be placed under a form of public ownership.

Let me quote one final tribute to show that the Labour government has done and is doing a good job for the British people. Your own U. S. Department of Labor, in a recent report, stated that not only had the economic position of the British wage earner been substantially improved since the end of the war, but that also he is a great deal better off than before the war. In stating this the Department of Labor pointed to "the virtual disappearance of unemployment, more equitable distribution of supplies," and the "better health" of the people as a whole. I think a report like that sounds more convincing to British workers than flowery Tory phrases about a "Workers' Charter."

Yes, we are carrying through, quietly and without much fuss, a real social revolution in present-day Britain. "Fair Shares" has become more than a slogan—it is a living reality to millions of people who certainly did not get their rightful share of the good things of life in prewar Britain.

Above all, we have effected these great social changes without impinging on one single civil liberty. Britain today is a free nation and we Socialists cherish that freedom. We shall go on doing so.



UNION OF SOVIET SOCIALIST REPUBLICS

by

THE INFORMATION BUREAU OF THE U.S.S.R.

EMBASSY OF THE UNION OF SOVIET SOCIALIST REPUBLICS

Washington, D. C.

Dear Mr. Golenpaul:

I am enclosing a copy of an article prepared for your use, as you requested, by the Soviet Information Bureau in Moscow, which as you know is an official agency of the Soviet Government. I send it with the understanding that, since it is officially prepared, it will be used without changes, deletions, or additions, and that the Soviet Information Bureau will be mentioned as its source.

I regret that it is impossible for us to furnish you with the statistical material which you mentioned, since we have no research department and are not equipped to prepare this sort of material. You may be able to obtain such material, however, from the American-Russian Institute, 58 Park Avenue, New York 16, New York.

October 20, 1948

Sincerely, Valentin A. Sorokin
Second Secretary, Soviet Embassy

THE UNION OF SOVIET SOCIALIST REPUBLICS (U.S.S.R.) is the first socialist state of workers and peasants in the world. For its territory the U.S.S.R. is the biggest country in the world: it occupies 22,270,600 square kilometers, or one-sixth of the globe's land surface. It had a population of 193,000,000 in 1940. Moscow is the capital of the U.S.S.R.

The U.S.S.R. is located in Eastern Europe and North and Central Asia. Its territory extends from the Carpathian Mountains and Gdansk Bay in the west to Cape Dezhnev and the Bering Strait in the Pacific Ocean in the east, and from the Arctic Ocean in the north to the towering peaks of the Pamirs and the Mongolian plains in the south. The northernmost point of the U.S.S.R. is Rudolf Island—81° 51' N. Lat.—and the southernmost point is the town of Kushka—35° 08' N. Lat. The shortest distance from west to east is more than 10,000 kilometers and from north to south, over 4,500 kilometers.

The Soviet country possesses immense natural wealth. It holds first place in the world for its forests, *chernozem* (black soil) lands and water-power resources. The waters of the U.S.S.R. abound in fish, the northern seas in marine animals, and the forests in furs. The U.S.S.R. occupies first place in the world for its resources of petroleum, iron ore (including quartzites), manganese ore, zinc, lead and peat. Its reserves of coal are the second largest in the world and the biggest in Europe. The

U.S.S.R. also possesses immense deposits of other useful minerals. Many of these were brought to light, surveyed and placed at the service of man only in Soviet times.

The Union of Soviet Socialist Republics was formed on the initiative and under the direct leadership of V. I. Lenin and J. Stalin.

As a result of the victory of the Great October Socialist Revolution in 1917 several Soviet Republics were formed on the territory of the former Russian empire and they entered into a military political union to fight foreign intervention and internal counter-revolution. After the end of the Civil War the need arose to pool the efforts of all the peoples of Russia to build socialism in accordance with a single plan to advance economically and culturally the nationalities lagging behind and strengthen the defensive capacity of the Soviet Republics. On December 30, 1922 the Soviet Republics united into a Federal state, the Union of Soviet Socialist Republics.

The U.S.S.R. was formed on the basis of a voluntary union of equal states, each of which preserves the right to free secession from the Soviet Union.

The Republics forming the U.S.S.R. in 1922 were the RUSSIAN SOVIET FEDERATIVE SOCIALIST REPUBLIC (R.S.F.S.R.), the UKRAINIAN SOVIET SOCIALIST REPUBLIC (Ukrainian S.S.R.), the BYELORUSSIAN SOVIET SOCIALIST REPUBLIC

Ukrainian S.S.R.), the TRANSCAUCASIAN SOVIET FEDERATIVE SOCIALIST REPUBLIC (T.S.F.S.R.), which at that time consisted of three Republics—Azerbaijan, Armenia and Georgia.

In the autumn of 1924 the UZBEK and TURKMEANIAN SOVIET SOCIALIST REPUBLICS were formed on the territory of the Turkestan Region, which was then part of the R.S.F.S.R., and the new republics joined the U.S.S.R. as full-fledged Union Republics. In 1929 the TAJIK AUTONOMOUS SOVIET SOCIALIST REPUBLIC was reconstituted into a Union Republic, and in 1936 the KAZAKH and KIRGHIZ AUTONOMOUS SOVIET SOCIALIST REPUBLICS were transformed into Union Republics. The Transcaucasian Federation was abolished in the same year and AZERBAIJAN, ARMENIA and GEORGIA acquired the status of Union Republics.

In the spring of 1940 the KARELIAN AUTONOMOUS SOVIET SOCIALIST REPUBLIC was transformed into the FINLAND-SWEDISH SOVIET SOCIALIST REPUBLIC and in the autumn of the same year the MOLDAVIAN AUTONOMOUS SOVIET SOCIALIST REPUBLIC was reconstituted into a Union Republic.

In July, 1940, the U.S.S.R. was joined by three Baltic Soviet Republics—LITHUANIA, LATVIA and ESTONIA.

At present the U.S.S.R. consists of 16 actual Soviet Socialist Republics.

The Soviet Union is a state of a new type where genuine democracy has been effected. The Constitution of the U.S.S.R., called the Stalin Constitution in honor of its author, has legislatively consolidated the achievements of the Soviet people gained in the struggle to build a communist society.

All power in the U.S.S.R. belongs to the working people of town and country as represented by the Soviets of Working People's Deputies. The Soviets are truly democratic elective organizations consisting of representatives of all the working people. The Soviets of Working People's Deputies, beginning from the rural Soviet and ending with the Supreme Soviet of the U.S.S.R., are elected on the basis of universal, direct and equal suffrage by secret ballot, through the Soviets of Working People's Deputies, the entire Soviet people are drawn into the administration of their socialist state. The Soviets derive their strength from the inviolable alliance of the workers, the peasants and the Soviet intelligentsia, from the great friendship of the Soviet peoples, and from the moral and political unity of the Soviet people attained under the leadership of the Communist Party of the Soviet Union.

The economic foundation of the U.S.S.R. is the socialist system of economy and

socialist ownership of the instruments and means of production. This economic foundation has been firmly established as a result of the liquidation of the capitalist system of economy, the abolition of private ownership of the instruments and means of production and the elimination of the exploitation of man by man.

Socialist property in the U.S.S.R. exists in two forms: state property belonging to the whole people, and cooperative and collective farm property, i.e., the property of collective farms and cooperative societies. In conformity with this there are two types of socialist production enterprises—state, and cooperative collective farm enterprises. The latter have arisen as a result of unions of small producers (peasants, handicraftsmen) formed voluntarily and with the assistance and support of the State.

The land, its mineral wealth, waters, forests, mills, factories, mines, rail, water and air transport, banks, communications, large state-organized agricultural enterprises (state farms, machine and tractor stations, etc.), as well as municipal enterprises and the bulk of dwelling houses in the cities and industrial localities are state property, i.e., belong to the whole people.

The common enterprises of the collective farms and cooperative organizations, their output, as well as their common buildings constitute the common, socialist property of the collective farms and cooperative organizations. Each household in a collective farm, in accordance with the rules of the agricultural cooperative, in addition to its basic income from the common, collective farm enterprise, has for its personal use a small plot of household land and, as its personal property, a subsidiary husbandry on the plot, a dwelling house, livestock, poultry and minor agricultural implements.

The land occupied by the collective farms is secured to them for their use free of charge and for an unlimited time, i.e., in perpetuity.

In the U.S.S.R., alongside the socialist system of economy, which is the predominant form of economy in the country, the law permits the small private economy of individual peasants and handicraftsmen based on their own labor and precluding the exploitation of the labor of others.

Soviet law protects the personal property rights of citizens in their incomes and savings from work, in their dwelling houses and subsidiary home enterprises, in articles of domestic economy and use, and articles of personal use and convenience, as well as the right of citizens to inherit personal property.

The economic life of the U.S.S.R. is determined and directed by the state national-economic plan. The entire na-

tional economy is conducted with the aim of increasing the public wealth, of steadily raising the material and cultural standards of the working people, of consolidating the independence of the U.S.S.R. and of strengthening its defensive capacity.

In Soviet times the U.S.S.R. has been transformed from an agrarian land with a poorly developed industry into a mighty industrial country. The backbone of modern industry, the iron and steel industry, has been built up anew. The country has established its own tractor, automobile, machine tool, chemical, aircraft and other branches of industry which it did not have before. The output of large-scale industry grew from 11,000 million rubles in 1913 to 129,500 million rubles in 1940.

The industrialization of the country was the result of the successful fulfillment of the Stalin Five-Year Plans for the country's economic development. During the prewar Five-Year Plan periods, capital investments in the national economy mounted from 3,700 million rubles in 1928 to nearly 43,000 million rubles in 1940. Industrial output rose steadily throughout those years. The gross output of all industry increased from 21,400 million rubles in 1928 to 138,500 million rubles in 1940, i.e., more than 6.5 times, with the output of the means of production rising ten times over. At the same time, the production of consumer goods registered an increase of more than four times, from 12,900 million rubles in 1928 to 53,700 million rubles in 1940.

New railway lines were built on a territory of the U.S.S.R. which facilitated the rapid economic and cultural advancement of the formerly backward areas and a rise in the living standards of the peoples inhabiting them. Freight carriage on the railways increased from 93,000 million ton-kilometers in 1928 to 415,000 million ton-kilometers in 1940, i.e., nearly four and a half times.

In pre-Soviet times, industry was concentrated mainly in three to four industrial areas. During the Soviet years, and particularly in the course of the Five-Year Plans, new industrial centers came into being. The coal and metal producing area of the Donbas was supplemented by a second coal and iron and steel center in the East—the Urals and Kuznetsk—which combines the coal of the Kuznetsk (West Siberia) fields and the iron ores of the Urals. The biggest metal works of this center, the Magnitogorsk iron and steel mills in the Urals and the Stalin iron and steel mills in Kuznetsk, are together producing more metal than all of tsarist Russia.

New coal fields have been found and their exploitation launched in Soviet times, such as Karaganda in Kazakhstan, Piechora

in the Far North, Bureya and Kivd Raichikhin in the Far East. It is only the Soviet state that is making full use of the advantages offered by the country's coal wealth, both as regards its distribution in different areas and its big variety.

In oil production the extension of the old areas in the Caucasus is accompanied also by the discovery and exploitation of new deposits in the districts of the Volga and the Urals (known as the Second Baku in the Georgian Republic, Daghestan, the Far East, Uzbekistan and in the Ukraine). The total oil resources brought to light by the efforts of Soviet geologists are today many times greater than in 1913.

The list of nonferrous metals plants located formerly only in the Urals has been extended by many new works in Kazakhstan, Siberia and the North. The textile industry, formerly concentrated only in the central regions, has been widely developed in the main cotton-growing areas of Central Asia, as well as in Transcaucasia and Siberia. Many food factories have been built in the main raw materials areas.

The Soviet Union is the only country in the world with a collective farming system. Instead of a vast number of individual small peasant households with their primitive implements which were dominated by landlords and rich peasants, the U.S.S.R. has today large-scale agriculture in the shape of collective farms, state farms and machine and tractor stations employing modern machinery and scientific cultivation methods. Soviet agriculture had, in 1940, 683,000 tractors (in terms of 15 hp units), 197,000 combine harvesters and large quantities of other agricultural machinery. During the prewar Stalin Five-Year Plans, the gross production of agriculture increased from 15,000 million rubles in 1928 to 23,000 million rubles in 1939, while the harvest of grain rose from 4,500 million poods to 7,300 million poods respectively. There was a big increase in the herds of livestock on the collective farms and state farms.

As a result of all these changes effected in Soviet times a new socialist economy has been developed which knows no crisis and unemployment and which provides for members of Soviet society all opportunities for a prosperous and cultured life.

Soviet society consists of two friendly classes—workers and peasants—as well as the intelligentsia.

The U.S.S.R. is a multinational socialist state founded on fraternal cooperation and equality of all the peoples inhabiting it. Living in the Soviet Union are some 150 peoples and nationalities. Russians comprise more than half of the entire population. Next come the Ukrainians (approximately one-fifth of the total population).

flowed by Byelorussians, Tatars, Uzbeks, Georgians, Armenians, Kazakhs, Azerbaijanians, Kirghiz, Chuvashes, Bashkirs, Abkhazians, Turkmens, Estonians, Tajiks, Chechens, Letts, Moldavians, Jews, etc.

The problem of equality and fraternal cooperation of nations within a single Federal state has been fully solved in the U.S.S.R. All citizens of the U.S.S.R., irrespective of nationality or race, are equal. Any direct or indirect restriction of the right of, or conversely, the establishment of any direct or indirect privileges for citizens, on account of their race or nationality, as well as any advocacy of racial national exclusiveness or hatred and contempt, is punishable by law.

The structure of the multinational socialist state reflects the great concern the Soviet state and the Communist party display for the interests of each nationality of the U.S.S.R., which is expressed in the Lenin-Stalin national policy and genuine consistent democracy. It was the application of the Lenin-Stalin national policy and Soviet democracy and the fraternal help of the great Russian people, that have enabled the formerly oppressed people to build up their statehood in a very short space of time, establish a first-class industry, develop agriculture and advance their culture, national in form and socialist in content.

The great gains of the Soviet people are embodied in the rights which are recorded in the Constitution of the U.S.S.R.

The Soviet Union is the first country in the world to accord all its citizens the right to work, i.e., the right to guaranteed employment and payment for work in accordance with its quantity and quality. The right to work is ensured by the socialist organization of the national economy, the steady growth of the productive forces of Soviet society, the elimination of the possibility of economic crises and the abolition of unemployment.

Citizens of the U.S.S.R. have the right to rest and leisure. This right is ensured by the establishment of an eight-hour day for factory and office workers and a reduced work day, ranging from seven to four hours, for the more arduous trades, and annual paid vacations and the provision of a wide chain of sanatoria, rest homes, clubs, sports grounds, etc.

The Constitution gives Soviet citizens the right to material security in old age and also in case of sickness or disability. This right is ensured by the extensive development of social insurance of factory and office workers at the expense of the state, free medical aid and the provision of a wide network of health resorts for the use of the working people.

The U.S.S.R. accords all citizens the right

to education. This right is guaranteed by universal and compulsory elementary education, by the system of state stipends in higher educational establishments, by instruction in school being conducted in the native language and by the organization of free vocational, technical and agronomical training for the working people in factories, state farms and machine and tractor stations. In vocational, railway and industrial training schools, in Suvorov military schools and a number of other institutions, the Soviet state assumes not only all expenses of tuition but also provides full maintenance of the students.

Women in the U.S.S.R. are accorded equal rights with men in all spheres of economic, government, cultural, political and other public activity. The possibility of exercising these rights is ensured by women's being accorded an equal right with men to work, payment for work, rest and leisure, social insurance and education, and by state protection of the interests of mother and child, state aid to mothers of large families and unmarried mothers, maternity leave with full pay and the provision of a wide network of maternity homes, nurseries and kindergartens.

In order to ensure the citizens freedom of conscience, the church in the U.S.S.R. is separated from the state and the school from the church. Freedom of religious worship and freedom of antireligious propaganda is recognized for all citizens.

The Constitution of the U.S.S.R. guarantees citizens political freedoms: freedom of speech; freedom of the press; freedom of assembly, including the holding of mass meetings; freedom of street processions and demonstrations. These rights are ensured by placing at the disposal of the working people and their organizations printing presses, stocks of paper, public buildings, communications facilities and other material requisites for the exercise of these rights.

In conformity with the interests of the working people and in order to develop the organizational initiative and political activity of the masses of the people, citizens of the U.S.S.R. are guaranteed the right to unite in public organizations, trade unions, cooperative societies, youth organizations, sport and defense organizations, cultural, technical and scientific societies. The most active and politically conscious citizens in the ranks of the working class and other sections of the working people unite in the Communist party of the Soviet Union (Bolsheviks), which is the vanguard of the working people in their struggle to strengthen and develop the socialist system and is the leading core of all organizations of the working people, both public and state.

The Constitution of the U.S.S.R. guarantees all citizens the inviolability of the person and the law protects the inviolability of citizens' homes and the privacy of correspondence.

The treacherous attack on the Soviet Union by Hitler Germany in 1941 interrupted the peaceful constructive endeavors of the country of socialism. The Soviet people, led by Joseph Stalin, rose to defend their socialist homeland.

In a short space of time the national economy of the U.S.S.R. was geared to war. Despite the huge losses, the difficult conditions of wartime and the occupation of a substantial territory by the enemy, the economy of the U.S.S.R. developed successfully in wartime. The industrial facilities in the interior of the country were swiftly expanded and developed in wartime, thanks to the large-scale modern industry built up in the Stalin Five-Year Plans, as well as the rapid re-establishment of a large number of factories and mills moved to the East from the zone of hostilities and new construction effected in wartime. During the first half of 1945, industrial output in the Eastern regions of the U.S.S.R. was double that of the first half of 1941, with the production of war industry increasing 5.6 times.

Under the leadership of Generalissimo Stalin the Soviet Army smashed fascist Germany.

The victory scored by the Soviet Union in the Great Patriotic War demonstrated to the entire world the might and invincible strength of the first state of workers and peasants in the world. The Soviet social system, the Soviet state order have withstood all the trials and proved their vitality by emerging victorious in this, the bitterest and hardest of all wars.

The schemes of the Hitlerites failed, schemes based on the expectation that they would succeed in setting up discord among the peoples of the Soviet Union, in fanning national enmity among them and in this way facilitating the defeat of the U.S.S.R. The friendship of the Soviet peoples has grown stronger during the war years and the Soviet multinational Soviet state has emerged from the war not weaker but mightier than ever.

After the victorious termination of the Patriotic War the Soviet people have once again resumed their peaceful socialist upbuilding. The German fascist invaders inflicted immense damage to the national economy of the country. The invaders destroyed in full or in part 1,710 towns and more than 70,000 villages, leaving 25 million people without shelter. The Hitlerites destroyed 32,000 industrial establishments and 65,000 kilometers of railway lines, ruined and looted 98,000 collective farms,

nearly 2,000 state farms and about 3,000 machine and tractor stations. The total damage inflicted by the German invasion and occupation of the Soviet Union is estimated at 128,000 million dollars.

Having successfully started restoration while the war was still on, the U.S.S.R. is continuing to rebuild its national economy and develop it further in the postwar period. As before the war and in wartime the country's economic development is proceeding in accordance with a single socialist plan.

The postwar Stalin Five-Year Plan envisages the complete rehabilitation of war-torn areas, the regaining of the prewar level in industry and agriculture and the exceeding of it by a substantial margin. In conformity with this aim, centralized capital investments for the recovery and further development of the national economy have been fixed at 250,300 million rubles; the value of restored and newly built enterprises, which will be commissioned in the Five-Year period, is to be 234,000 million rubles.

The current Five-Year Plan provides for priority restoration and development of heavy industry and railway transport, the advance of agriculture and of the industries producing consumer goods in order to raise the living standards of the people and assure the country an abundance of the main consumer goods. It likewise envisages further technical progress in all branches of the national economy.

The Soviet people, many millions strengthened by the party of Lenin and Stalin, are working with great enthusiasm on the accomplishment of the postwar Five-Year Plan. Socialist competition for the completion of the Five-Year Plan in four years has spread to every factory and mill, mine and oil field, collective farm and state farm.

The devoted efforts of the Soviet people are bearing tangible fruit. New factories, mines and power stations have risen throughout the country. Thousands of enterprises have been rebuilt in the war-torn areas. As a rule the restored enterprises have greater capacities and are technically on a higher level than before the war. Among the revived enterprises are the famed Dnieper Hydroelectric Station, the mammoth iron and steel mills of the South, hundreds of Donbas mines, the Zuyev steam power station, the Rostov Agricultural Machinery Works, the Zaporozh Combine Harvester Factory and hundreds of others. The world's biggest gas pipeline from Saratov to Moscow was completed after the war.

Industrial output is increasing from month to month. As early as October, 1945 the gross monthly output of large-scale industry reached the average monthly output

put for 1940. Thus in 1947 the U.S.S.R. regained the prewar level of industrial production. Output of the entire Soviet industry rose by 22 percent in 1947, as compared with 1946.

The rate of increase in industrial output has been mounting steadily. The program for industrial production in the first half of the current year was exceeded by five percent. In the second quarter the excess amounts to six percent.

The gross output of all industry during the second quarter of the current year was 24 percent greater than for the corresponding period of 1947. Large quantities of commodities were produced over and above plan, among them ferrous and non-ferrous metals, steam coals, petroleum products, machinery and equipment, mineral fertilizers, dyes, lumber and building materials, paper, fabrics, rubber footwear, butter and vegetable oils, etc. The plan for reduction in production costs was also exceeded. The saving resulting from the reduction of production costs amounted to 1,500 million rubles in the first half of 1948.

Considerable progress has been made in construction. The volume of all capital construction in the first half of the current year was 26 percent greater than for the same months of 1947. Centralized capital investments made in the formerly occupied areas both for restoration and new construction amounted to 7,700 million rubles. During this period 1,300,000 square meters of living floor space in towns and 63,000 homes in rural localities were built or restored. Industrial output in these areas increased by 41 percent as compared with last year, with pig iron registering a gain of 39 percent, steel 51 percent, rolled metal 55 percent.

The output of coal in the Donbas rose by 20 percent.

Freight carriage by rail, river and marine transport is increasing from month to month. During the second quarter of 1948 the daily loadings on the railways were 14 percent higher than for the corresponding months of last year; river shipping increased by 27 percent and the merchant marine by 12 percent.

The total number of workers and other employees increased by more than 2,200,000 in the second quarter of 1948 as compared with the same period of last year.

Especially notable progress has been made by agriculture. The total grain crop in 1947 was 58 percent above that of 1946;

cotton increased by 21 percent, potatoes by 30 percent, sunflower seed by 79 percent and sugar beets by 190 percent. The advance of agriculture is continuing in the current year, the third year of the postwar Five-Year Plan. According to preliminary data the total sown area in 1948 is more than 11 million hectares above that of last year, including an increase of 5,500,000 hectares under spring wheat.

As a result of the successful realization of the Stalin postwar Five-Year Plan, the well-being of the people has been steadily improving. At the end of 1947 the Soviet state effected a monetary reform, abolished rationing for foodstuffs and manufactured goods, reduced prices on certain goods and effected a monetary reform which increased the purchasing power of the Soviet ruble.

Tremendous successes have been scored in the domain of culture. The Soviet educational system is the most democratic in the world—it is accessible to the people and serves their interests. In the past school year more than 30,000,000 pupils attended the country's 200,000 general educational schools. Universal elementary education has been realized in the Soviet Union, with tuition being given in the languages of the different Soviet nationalities. In towns and industrial settlements, universal compulsory education extends not only to elementary but also to junior secondary (seven-grade) schools.

Together with general educational schools, the U.S.S.R. has also a wide chain of vocational establishments, trade, railway and industrial training schools, which prepare skilled workers for the different industries and transport. Thousands of secondary technical schools which accept young men and women who have acquired a seven-year education train personnel for industry, agriculture, trade, etc.

The 800 higher educational establishments of the Soviet Union had a total student body of 700,000 in the 1947-48 academic year, or more than all the countries of Europe taken together.

Soviet science, the most progressive science in the world, is successfully developing in the U.S.S.R. Literature, the fine arts and music have attained an exceedingly high level of development in the Soviet Union. Stalin Prizes are being awarded annually for outstanding scientific works, inventions, new production methods, the finest works of writers, composers, artists and the best theatrical productions and films.



THE POLITICAL SYSTEMS IN SOUTH AMERICA

by

ROBERT J. ALEXANDER

Of the Economics Department, Rutgers University

Formerly with Labor Relations Division of the Office of Inter-American Affairs

SOUTH AMERICA is a land in which the labels capitalism, socialism and fascism do not fit neatly. Any one of the Latin-American countries is likely to show some characteristics of all three systems. A conservative government is likely to own industries which, in a true capitalist state, would be run by private enterprise. On the other hand, a left-wing political party is likely to put more emphasis on private enterprise than on state socialism.

European ideologies have made comparatively little impression on South America. The Latins have problems of their own, and have developed political programs to match. Following are some of the basic problems that have shaped their course:

1. By and large, South America has a "semi-colonial" economy. It is rich in natural resources, such as oil, tin and crop-growing land, but is poor in manufacturing industries. For example, Columbia sells its coffee to the rest of the world and buys from highly industrialized countries, such as England and the United States, the automobiles and locomotives it needs.

This semi-colonial economy has one overwhelming drawback. In time of depression, a country depending on a single product can be ruined if that product won't sell. If the country had its own industries, it would not be so dependent on the outer world for essentials.

2. Many of the South American countries have small, wealthy aristocracies, who for generations have been accustomed to rule; and have masses of underprivileged people. The upper class usually has derived its income and power from ownership of agricultural lands. The underprivileged class has been largely made up of agricultural laborers, virtual serfs.

3. By and large, South American countries lack the means to put their economies on a stable footing.

Following are some of the essentials that are lacking:

Transportation links. Railroads are sparse in the back country. High mountains and jungle areas balk them. Only Argentina, El Salvador and Cuba have nationwide systems of paved highways. Airplane lines have helped bind together the continent. The countries that straddle the Andes mountains—Colombia, Ecuador and Peru—are bringing into contact with the rest

of the nation areas that before seemed hardly part of the country. But large gaps still remain. Even today the great basin of the Amazon River and its tributaries is outside the commercial market.

Capital. Most countries of South America do not have enough investment capital to set up the industries they need. During the war, the United States followed a liberal policy of aiding Latin-American industrialization. Chile and Brazil received loans for producing iron and steel. The United States loans were partly designed to get more goods for the war effort, partly to encourage Latin-American countries to side with the Allies. Since the war, United States government credits have been almost completely cut off. Latin nations have had to hunt private capital investments.

Machinery. The United States is by far the largest source of supply for heavy industrial equipment. Other sources are England, Italy, Sweden and Switzerland. But all together these countries cannot supply Latin America with the machinery she needs.

Skill. There is no large, trained body of industrial workers in South America and no long tradition of craftsmanship, as in highly developed countries. Nor are there technicians to direct operations. During the war, a large number of Latin-American workers and technicians were brought to the United States for training. Since then, Washington seems to have lost interest.

The problems of South America have determined the goals of its political parties. To an increasing degree the governments—and the opposition parties, also—have become interested in diversifying their nations' economy and creating new industries. This tendency is not confined to governments of any particular political orientation. Conservative President Alessandri of Chile followed this policy of economic development, and so did the fascist minded President Vargas of Brazil. The same policy is being followed by the more or less socialist government of Venezuela.

Industry is encouraged by the granting of tax concessions and tariff protection and by government-financed development corporations that make loans or direct investments to establish industries such as steel, rubber, glass, chemicals and textiles.

The question of private versus public ownership of new industries has not been created dogmatically. Even left-wing parties, who favor ultimate socialization of the principal means of production, have felt that the main thing was to get more capital, either private or public. On the other hand, even the conservatives have made little objection to government ownership and development of new industries. Public utilities have been mainly in the hands of foreign companies, and there is a growing tendency for Latin-American governments to take them over and develop further electrical projects. Mixed companies—part public, part private—also are popular.

The traditional political parties throughout most of Latin America are the Conservative and Liberal parties. Frequently they have represented the small wealthy class. With stirrings of popular revolt in the last quarter of a century, new parties began to appear.

Communism has made some headway, but at the moment the Latin-American governments are almost unanimously against it. Brazil, Chile and Costa Rica have outlawed the Communist party. Despite this fact, it retains a considerable influence in those countries and in Cuba. The Communists are, of course, an exception to the general principle that the Latin-American revolutionary movement does not closely follow European models. The Communists there are the same as everywhere, with their primary allegiance to Moscow.

The countries in which the Communists have made the least headway, or none at all, are those in which home-grown types of popular movements have caught the imagination of the people. These can be roughly grouped into two types: (1) The Aprista type; and (2) The Peronista type.

The name Aprista comes from the initials APRA—Alianza Popular Revolucionaria Americana. This political party, founded in Peru, is led by Víctor Raúl Haya de la Torre. In the early 1930s, it had branches in Bolivia, Chile and other near-by countries, but now it has officially dropped its international affiliates.

Several similar people's parties have attained influence in other countries. The Acción Democrática is the governing party in Venezuela. The Auténtico party rules in Cuba. Other kindred ones are the Febrerista party in Paraguay and the Partido Social Democrata in Costa Rica. These parties are authentically native Latin-American. They have grown up independently and although they have a loose continent-wide organization, there is no central direction of the group.

The people's parties appeal to the work-

ers, both in factories and in fields, and to the middle classes. They have a socialist orientation, but their main goal is to further the economic development of their nations. They want social legislation to protect the poor. They favor state intervention and direction of the economies as necessary. They do not want foreign interests, particularly the United States, to get a strangle-hold. They do welcome foreign capital on terms of equality and reasonable profit. Finally, these parties are firm believers in political democracy and freedom. They are anticommunist and antitotalitarian.

In contrast to the Aprista and similar people's parties, there is another group of political parties which can be called the Peronistas. The name comes from Juan D. Perón, President of Argentina, who set the pattern with his Peronista party. In this general category can be placed the Movimiento Nacional Revolucionario of Bolivia, and Getulio Vargas' Partido Trabalhista in Brazil.

There are similarities between this group and the Aprista party. They preach economic development of their nations; they advocate social legislation; they base themselves largely on the working and middle classes.

The big difference is that the Peronista parties are not firmly democratic. They bear resemblance to fascism. They were built around the personality of a leader, or fuehrer, at the helm of a dictatorial government. They operate pragmatically, with little or no doctrinal basis. They are nationalist in a more jingoistic way than the Apristas. In the case of Argentina, there are some disturbing overtones of aggressive imperialism.

Socialist parties exist in most countries, but are not of decisive influence.

With these political elements in mind, one can get a better picture of the situation if he examines each of the republics of Latin America.

Argentina. This country is completely dominated by President Juan D. Perón and his followers. He is fundamentally changing the economic situation, which until recently was controlled by the big landlords of the pampas, owners of the corn, wheat and cattle. Perón gained the support of the workers by forcing concessions from the employers. The trade unions he converted into tools of his government. He undoubtedly has the backing of the majority of the workers and the hostility of most landlords, big businessmen and professional people. He is carrying out a large industrialization program and has nationalized a number of the public utilities formerly held by foreign capitalists.

Bolivia. The majority of the population

is Indian. Tin is the principal export, and conditions in the mines are bad. Among the tin miners the Peronista-like Movimiento Nacional Revolucionario (MNR) has found its chief support. This group, which also has some backing among the country's few factory workers, is the chief opposition to the present government. The nation has always been plagued by fear of Indian revolt, and all evidences of such developments have been ruthlessly suppressed.

Brazil. Brazil's manufacturing production is the greatest in Latin America. Since the depression, Brazil has steadily grown away from her former great dependence on coffee, which has accounted for more than two-thirds of the exports. Production of other agricultural products has expanded, and industry has grown. After fifteen years of semi-fascist dictatorship under Getulio Vargas, a more or less democratic period began. Among the parties which has developed since then is the Communist party, which received over 10 percent of the vote early in 1947 but which was again outlawed a few months later. The Peronista-like Partido Trabalhista de Vargas has declined since he was thrown out as President.

Chile. For several generations Chilean economy was dominated by nitrate and copper mining. Although these are still the two biggest industries and the chief sources of government finance, there has been a growth of manufacturing. Chile's agriculture is principally in the hands of large landlords. Unions are strong and are influenced by Communists and Socialists. The Communists in 1946-47 were in the first government of President Gabriel González Videla for six months. He outlawed them early in 1948.

Colombia. Economically, this country depends principally on coffee, which is cultivated mainly by small landholders. Its petroleum has been developed by American companies; and in recent years, industry has begun to arise. Colombia has a tradition of civilian government and political democracy, which was seriously shaken by the popular rioting in Bogotá in April, 1948. Afterward, a coalition government was set up to avoid a military dictatorship.

Costa Rica. This is one of the few Latin-American countries in which the small family farm dominates the agricultural picture. This has contributed much to economic and political stability. However, there was a five-week civil war in March-April, 1948, and there came to power a government in which the dominant influence is the pro-Aprista Partido Social Democrata.

Cuba. Sugar and tobacco are the mainstays of Cuba. The sugar industry tends

to be dominated by the United States banks and refining companies. There is a fair amount of manufacturing industry, which the present government is trying to expand. Since 1944 the country has been in the hands of the pro-Aprista Auténtico party. The regime has carried out programs of education, housing and economic development.

Dominican Republic. This country, in which sugar and bananas are the principal products, is run by a dictator, Trujillo, who has done a great deal to diversify the country's agriculture and restore its public credit; he has also intensified racial prejudice and increased militarism.

Ecuador. Most Ecuadorians are Indians who live and work on virtually self-sufficient haciendas. The petroleum industry and sugar cultivation dominate the economy of the coast. There are only the beginnings of manufacturing industry. The Conservative and Liberal parties are the two most important political groups, and no government has attempted a widespread reform program.

El Salvador. This country, economically dominated by coffee, is the third largest producer of it in Latin America. Almost all of the land is in the hands of a small group of coffee planters, who dominate the nation economically and, in conjunction with the military, run it. It has suffered from almost incessant dictatorship; no political parties function in the open, although there is an illegal Communist party.

Guatemala. There are really two Guatemalas—the Indian part of the country where the descendants of the ancient Mayas lived in a society based on subsistence agriculture; and the modern Guatemala where new industries grow in the cities and where the United Fruit Company has large plantations. Coffee and bananas are its chief export crops. After a long series of dictatorships, Guatemala is now being governed by a democratic regime which has been in power for the last three years.

Haiti. An all-Negro country of small coffee farmers, Haiti is very poor. It has virtually no industry; its ruling class is the government bureaucracy. Haiti is overpopulated, and the present government which is reasonably democratic, is interested in developing new industries, irrigation projects and education. Political parties are new and weak in Haiti.

Honduras. Economically, this is perhaps the most backward nation in Central America. Subsistence agriculture predominates throughout most of the country, although along the north coast the United Fruit Company runs the largest planting

in all its empire. There is virtually no manufacturing industry. Carlos Andino is a simple, honest military dictator who has been interested principally in keeping himself in power. In the process, he has kept civil peace in Honduras for fourteen years.

Mexico. This country, after a long revolutionary period, has become increasingly conservative. There has been rapid economic development, most of it brought about by private capital—much of it from men who were revolutionaries in their youth. During the Cárdenas administration from 1934-40 and the years that have followed, the process of dividing the landed estates was virtually completed and there are practically no large estates, although at one time all the land was in large holdings.

Mexico allows freedom of thought, but elections are corrupted and so far have always been won overwhelmingly by the party favored by the government.

Nicaragua. This is an agricultural nation, in which most of the cultivated land is in the hands of large landowners, of whom the Dictator, General Anastasio Somoza, is one of the largest. Corn, coffee and sugar are the country's main crops, the last two being grown mostly for export. Cattle raising is a virtual monopoly of Somoza.

Panamá. This country draws most of its economic life from the operation of the Canal. There has been some growth of minor industries. Politics is confusing and quite personalist. There are small Socialist and Communist parties, and the trade unions are weak.

Paraguay. This country is virtually a fief of Argentina. It is a largely Indian nation in which grazing and agriculture predominate. Some of the continent's worst labor conditions are said to exist in the quebracho and maté plantations. This country has experienced only short lapses from dictatorship. There is an Aprista-like group called the Febrerista party which fights with the Communists for control of the very weak labor movement. Dictator Higinio Morínigo, in power since 1940, was overthrown by an army coup in 1948, although no real change has resulted so far from this upset.

Peru. The majority of Peruvians are Indians and live either as sharecroppers or semi-serfs on large estates or in large

agrarian communities. Peru has large quantities of petroleum which are now being exploited in part by United States companies. Industries such as textiles, rubber and food processing have grown up. The small landlord ruling class, which has run Peru since the days before independence, lives in constant fear of an awakening of the Indians. It has been unwilling to accept political democracy, fearing the downfall of its power. It has fought without quarter against the Aprista party, which has been illegal throughout most of its existence.

Uruguay. This is perhaps the most truly democratic country in Latin America. It has a long civilian tradition and has had a democratic government for most of the last fifty years. Most of the land is owned by large landowners, who support the Nacionalista party, a traditional Conservative party. Grazing predominates in the country, and meat packing is the largest industry. Some manufacturing has grown up in Montevideo. The labor movement is weak and divided. Uruguay is famous for its experiments in public ownership in meat packing, electric power and transport.

Venezuela. This country is dependent on the oil industry, which provides about half the national income and more than three-fourths of the government's revenue. Conscious that the oil boom will not last forever, the present government is busy trying to develop industries and agriculture to take its place. The present regime, dominated by the Aprista-like Acción Democrática party, came to power in a revolution in October, 1945. The government has doubled the number of students and pushed education out into the countryside. It has carried out a program of agricultural development, including co-operatives and has pushed forward industrialization.

Latin America is in the midst of a profound economic and social revolution, which is for the most part expressed in terms different from those of Europe and North America. This unrest and change is part of the worldwide movement of revolt of "backward" peoples, which bids fair to transform those countries over a period of time into advanced countries which no longer will be "semi-colonial" but will stand on their own feet.



THE ATTITUDE OF THE WORLD COUNCIL OF CHURCHES

by

CHARLES P. TAFT

President, The Federal Council of the Churches of Christ in America*

THE WORLD COUNCIL OF CHURCHES did not approve any statement on capitalism, communism or socialism, but it did receive the report of one of its four discussion sections, that on the Church and the Disorder of Society, and recommended it to the consideration of the churches. The report was discussed by the whole assembly and amended, so that it is fair to say that it represented pretty much the mind of the delegates. What was that mind?

Before answering that question I must explain some important facts.

A basic orthodox Christian doctrine holds that the world contains inevitable evil in human nature, and that the Christian ideal of perfection cannot be achieved on earth. Therefore, every economic system, since it operates through imperfect men, must contain evil and must be critically appraised by the Christian Church in the light of the Christian standards. The Church cannot and must not support any one system.

A sharp conflict has existed among the Churches as to whether Christians should attempt to judge between degrees of such human evil and work for social progress. The extreme European theologians felt that everything was so bad that there was no use for the Church to do anything but preach the Gospel and wait for Heaven. The Nazi experience changed most of these, but Niemöller's speech at Amsterdam and much of what Dr. Karl Barth had to say there was utterly pessimistic in the old tradition. They would not worry much about comparisons.

Americans and Anglo-Saxons generally (and the Eastern Orthodox on the whole) reject this pessimism and believe in making comparative judgments, and working on the reform of our social and economic systems. So they, too, will insist as a matter of religious principle that the Church and Christians must look clearly and frankly at every social situation and economic law or institution, and measure them against Christ's perfection.

This was the atmosphere in which some hundred Churchmen drew up this controversial report on the disorder of society which the other three-quarters sent forth.

It was the first important church gathering which got out of the study and showed a real understanding of the actual human problems of economic life. We had no argu-

ments about systems; we were concentrating on what all systems in our modern technical society do to human beings. For instance, there was agreement on the problem of power and its concentration today, whether in government or in economic organizations around the world. The Council said: "In such conditions social evil is manifest on the largest scale not only in the greed, pride, and cruelty of persons and groups; but also in the momentum or inertia of huge organizations of men, which diminish their ability to act as moral and accountable human beings . . . [Our modern technology] has collected men into great industrial cities and has deprived many societies of those forms of association in which men can grow most fully as persons."

But the World Council did in effect speak on these specific issues.

The criticism of capitalism was concrete and a great deal more discriminating than that of any earlier church gathering:

"The church should make clear that there are conflicts between Christianity and capitalism. The developments of capitalism vary from country to country and often the exploitation of the workers that was characteristic of early capitalism has been corrected in considerable measure by the influence of trade unions, social legislation, and responsible management. But (1) Capitalism tends to subordinate what should be the primary task of any economy—the meeting of human needs—to the economic advantage of those who have most power over its institutions. (2) It tends to produce serious inequalities. (3) It has developed a practical form of materialism in Western nations in spite of their Christian background, for it has placed the greatest emphasis upon success in making money. (4) It has also kept the people of capitalist countries subject to a fate which has taken the form of such social catastrophes as mass unemployment."

The Council condemned the ideology of laissez-faire capitalism. That question was fully discussed in the section, and what the section meant to condemn was the theory that the unrestricted operation of the law of supply and demand in a free market, guided only by enlightened self-interest, would automatically produce justice. It does not.

Nevertheless orthodox moderate Socialists would not get much comfort from other passages on property, economic laws, and planning:

*Mr. Taft was Episcopal Delegate to the Assembly, World Council of Churches, at Amsterdam, Aug. 22-Sept. 4, 1948.

"In the light of the Christian understanding of man, we must, however, say to the advocates of socialization that the institution of property is not the root of the corruption of human nature. We must equally say to the defenders of existing property relations that ownership is not an unconditional right; it must, therefore, be preserved, curtailed, or distributed in accordance with the requirements of justice. . . . In all parts of the world new controls have in various degrees been put upon the free play of economic forces, but there are economic necessities which no political system can afford to defy. In our days, for instance, the need for stability in the value of money, for the creation of capital, and for incentives in production, is inescapable and worldwide. . . . Coherent and purposeful ordering of society has now become a major necessity. Here governments have responsibilities which they must not shirk. But centres of initiative in economic life must be so encouraged as to avoid placing too great a burden upon centralized judgment and decision."

All this, a friend of mine, a distinguished trade association economist, describes as "crypto-socialism." I cannot agree. This paper has been condemned by American Socialists, and would not satisfy our American left-wing labor press at all, which I do agree is crypto-socialist. This is a middle ground, as close to our kind of effective capitalism as to the moderate British socialism.

For communism the World Council had no sympathy whatever. Professor Joseph Hromadka, of Prague, a delegate of the Church of the Czech Brethren, was its principal defender. His position was that: "Its dynamism and religious pathos is to be sure a substitute for religion, but its vigor is due to an engrossing, fascinating idea of a society in which man will be free of all external greed, mammon and material tyranny and in which a fellowship of real human beings in mutual sympathy, love and good will would be established. . . . Communism . . . tends in its philosophy towards a total liberation of individual man. . . . The official ideology will undoubtedly undergo—as it actually is undergoing—a transformation from within."

Nobody at Amsterdam except perhaps one delegate from Hungary and one delegate from France believed that for a minute. There was no "influence from behind the Iron Curtain at work in Amsterdam." The World Council condemned vigorously among other things: "The belief that a particular class by virtue of its role as the bearer of a new order is free from the sins and ambiguities that Christians believe to be characteristic of all human existence; the materialistic and deterministic teachings, however they may be qualified, that are incompatible with belief in God and with the Christian belief in man as a person, made in God's image and responsible to him; the ruthless methods of Communists in dealing with their opponents."

It said: "It is a part of the mission of the Church to raise its voice of protest wherever men are the victims of terror, wherever they are denied such fundamental human rights as the right to be secure against arbitrary arrest, and wherever governments use torture and cruel punishments to intimidate consciences of men."

The ideology of communism, apart from this vicious police state, was also rejected because it could not redeem its promise of automatic freedom after the revolution. Hromadka's claim was thus totally denied.

The linking of this condemnation of the ideologies of communism with that of the ideology of laissez-faire capitalism has been criticised. It is, however, a standard Christian position, both Protestant and Roman Catholic, as asserted in their most official utterances. It is entirely sound in its exact meaning, but I would admit that it can be confusing to American laymen not used to theological language.

The World Council of Churches, therefore, stands for a middle ground, away from the reactionary rejection of any government intervention, and far away from the police state. It is not socialist, it condemns communism vigorously, but it would not admit free enterprise as the "plan of Christ," or "authorized by the Bible." The World Council is simply and deeply concerned to "preserve the possibility of a satisfying life for 'little men in big societies.'"

THE CATHOLIC ATTITUDE

by

THE REV. BENJAMIN L. MASSE, S.J.

Associate Editor of America; Executive Editor of Catholic Mind

THE CHIEF official sources of Catholic teaching on socialism, communism and capitalism are the social encyclicals of Pope Leo XIII and Pope Pius XI. The three most commonly quoted are *Rerum*

Novarum (1891), *Quadragesimo Anno* (1931), and *Divini Redemptoris* (1937). To these should be added various messages and addresses of the present Holy Father, Pope Pius XII, and, for Americans, a

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Statement entitled "The Church and Social Order" issued in 1940 by the Bishops of the Administrative Board of the National Catholic Welfare Conference.

In all these documents the Church deals exclusively with the moral aspects of social, economic and political life. As Pope Pius XI said: "The Church believes 'that it would be wrong for her to interfere without just cause in such earthly concerns,' but she can never relinquish her God-given task of interposing her authority, not indeed in technical matters, for which she has neither the suitable equipment nor the mission, but in all those that have a bearing on moral conduct."

With respect to socialism and communism, the Catholic position is very clear and simple: the Church condemns both systems as contrary to the law of God and forbids her children to embrace them.

Since communism is professedly atheistic and materialistic, since it preaches hatred and promotes class warfare, since, moreover, it denies the right to private ownership of the means of production, as well as other individual rights, the Church has no choice except to damn it completely. If Christianity is true, then communism must be false. There is not the slightest room for compromise.

That the Church extends this condemnation to socialism may, at first sight, seem to many surprising, and even unfair. Indeed, during the forty years which intervened between *Rerum Novarum* and *Quadragesimo Anno*, efforts were made to persuade Pius XI to revoke the ban on socialism imposed by Leo XIII. Though His Holiness conceded that the socialism of 1931 was not the socialism of the late nineteenth century, that it had abandoned in some cases its revolutionary class warfare for peaceful reform and watered down its teaching on public ownership, he still insisted that its materialistic view of society made it incompatible with Catholic faith and morality. "Whether socialism," he wrote, "be considered as a doctrine, or as an historical fact, or as a movement, if it really remain socialism, it cannot be brought into harmony with the dogmas of the Catholic Church."

It must be noted that in the context both Leo XIII and Pius XI meant "Marxian Socialism." Some movements popularly called socialist have never been condemned by the Church. Catholics, for instance, have not been forbidden by their bishops to join the Cooperative Commonwealth Federation of Canada, or the British Labour party. Catholics do in fact belong to both groups and take an active part in their affairs.

To give the Church's position on capitalism is more difficult, chiefly because no generally accepted definition of capitalism

exists. This much, at least, can be said: both Leo XIII and Pius XI, though affirming that the capitalistic system "in itself is not to be condemned," were sharply critical of abuses in modern economic society. These abuses they traced largely to "economic liberalism," which they certainly condemned. They repudiated both the excessive individualism which characterized the rise of industrialism and the concentration of economic power which, according to Pius XI, resulted from it. Though they defended private property as a natural right, they insisted on its social as well as its individual character. Against the rugged individualist who denied to workers the right of free association, and to the State the right of judicious intervention, they cited Christian teaching and tradition. While they did not anathematize the profit motive, they did deplore the "sordid love of wealth," which Pius XI called "the shame and great sin of our age." Similarly, they did not condemn competition, though they did clearly deny that it could ever be the sole regulating force of economic life. They taught that social justice and charity are essential, as "true and effective guiding principles," to a sound economic system.

Nowhere, then, did the Popes say that the capitalistic system is inherently vicious and incompatible with Catholic teaching. If they found grave abuses in it, they discovered also much that was good and worthy of praise. Accordingly, they saw the possibility of reform along Christian lines. They held that the capitalistic system as it actually exists could be purged of its abuses and made to serve more perfectly the divine purpose of all economic activity, namely, the satisfaction of the material needs of all human beings. To accomplish this reform by restoring morals to the marketplace was the purpose of their teaching. Or, as the American bishops wrote, in the Statement mentioned above:

In conformity with Christian principles economic power must be subordinated to human welfare, both individual and social; social incoherence and class conflict must be replaced by corporate unity and organic function; ruthless competition must give way to just and reasonable state regulations; sordid selfishness must be superseded by social justice and charity. There can only be a true and rational social order; then only can we eliminate the twin evils of insufficiency and insecurity, and establish the divine plan of a brotherhood of man under the fatherhood of God.

The Church, therefore, while continuing to condemn socialism and communism will remain critical of capitalism until these reforms have been accomplished.

In order to Secure the most Authoritative Facts concerning

HOW MAN LIVES

under Capitalist, Socialist and Communist Governments

The Editors have solicited from the Chief

Nations of the World

ANSWERS TO A QUESTIONNAIRE

Which would present a Comprehensive Analysis showing how
the Institutions of each Nation are serving the Fundamental

WANTS OF MAN



Replies to the Questionnaire from those various governments which
filled out the forms most fully are presented in the following pages.

Between answers given to the Questionnaire and information contained
in other portions of the Almanac, the reader may find discrepancies. If so, it
is due to the fact that the Editors have chosen sources at their disposal other
than the figures supplied by the specific governments to our Questionnaire.

Some governments failed to reply. A particular effort was made to obtain
a reply from the U.S.S.R. since Communism in that country has had 30
years in which to evolve its political and economic forms. The Washing-
ton Embassy of the U.S.S.R. recommended that the Soviet reply be furnished
by the American Russian Institute. The answers received from that
organization are incorporated in this section.

The various countries are always listed alphabetically.

To give a well-rounded idea of the United States' economy, information
has been gathered from selected States representative of varied geo-
graphic conditions and interests. And because Saskatchewan is not typical
of all Canada, the answers of that Province are listed separately.

THE ANSWERS TO THE QUESTIONNAIRE

NATIONAL INCOME

COST OF LIVING

£A=Australian pounds; s=shillings; cr=cruzeiros; £=pounds
k=kroner; l=lire; £T=Turkish pounds; r=rubles; p=pesos

Country	Income and (year)	Approx. per capita	Value in U. S. \$	Base date and rate	Comparison date and rate
Australia (£A)	1,497,000,000 (1947)	200	\$646	1923-27=100	1947=122.1
NOTE: As a result of a referendum held on May 29, 1948, price control passed into the hands of the states.					
Austria (s)	2,700,000,000 (1946)	403		1914=100	1935=105
NOTE: By the end of 1947, living costs had risen to 357 percent of the April, 1945, level.					
Brazil (cr)	91,100,000 (1945)			1935=100	1946=329
NOTE: Cost of living applies only to food.					
Canada (\$)	10,735,000,000 (1947)*	872	790	1920=100	1948=106.1
NOTE: The purchasing power of the dollar on June 1, 1948, was 94.3 percent of its 1920 power.					
Saskatchewan . . (\$)	519,000,000 (1946)*	580	522	1939=100	1948=159.5
China					
Nanking				1937=100	1948=39,848†
Shanghai				1937=100	1948=33,849
Chungking				1937=100	1948=19,816
Kunming				1937=100	1948=32,162
Finland (\$)	500,800,000 (1946-7)	125		1939=100	1948=842
France				1920=100	1948=7,200
Italy (l)	4,300,000,000†(1947)			1920=100	1947=5,645
Mexico (p)	12,970,000 (1946)			1939=100	1945=213.5
New Zealand (£)	460,000,000	278	1,120	1926-30=100	1948=124.5
Norway (k)	8,714,000,000 (1947)	2,900	580	1914=100	1948=272
NOTE: From 1920 to June, 1948 there has been a 9.4 percent decrease in the cost of living index.					
Poland	NOTE: Figures are not available. According to the private calculations of economists, the national income per capita in Poland increased about 21 percent from 1938 to 1948.				
Sweden (k)	20,500,000,000 (1947)	3,959	905	1914=100	1948=256
NOTE: In 1920, the index was 269, so that it is still lower than 1920 but 8.1 percent higher than at the end of the war.					
Turkey (£T)	7,769,585,000 (1944)	411	146		
Ankara				1938=100	1947=325
Istanbul				1938=100	1947=344
NOTE: Rents were frozen in 1938. Food in Ankara, in 1946, was 383 and clothes 473. In Istanbul, in 1946, food was 414 and clothes 429.					
U.S.S.R. (r)	128,300,000,000 (1940)	665	126		
NOTE: From pre-World War II to 1946 there was a 40 percent reduction in the cost of living. By 1947, food decreased 15 to 30 percent compared to 1946. In December, 1947, new prices were set for 1948 which were 12 percent lower than former rationed prices.					
United Kingdom . . (£)	8,770,000,000 (1947)	186	750	1914=100	1947=206
NOTE: If June 17, 1947 index is taken as 100, then May 11, 1948=108.					
United States (\$)	202,500,000,000 (1947)	1,323		1935-39=100	1948=168
NOTE: Cost of living increase from 1920 to July, 1948, is 21.2 percent.					

*Preliminary; in Canadian dollars. †All figures for Chinese cities are in estimated thousands. ‡Estimated.

SELECTED STATES AND AREAS

Income		Cost of Living		
State	Per capita	Area	June, 1920	June, 1948 % increase
California	\$1,643§	Buffalo, New York	144.8	167.2** 15.5**
Illinois	1,624	New York, New York	143.1	169.1 18.3
Mississippi	659	Chicago, Illinois	151.7	176.2 16.2
New Mexico	1,053	Houston, Texas	151.0	172.5 14.2
New York	1,781	Los Angeles, Calif.	147.8	168.8 14.2
North Carolina	890	San Francisco, Calif.	139.0	174.2 25.3
North Dakota	1,678			
Texas	1,128			
Wisconsin	1,337			

§Figures for all the states are for 1947.

**As of April, 1948.

NATION'S MANPOWER
LABOR FORCE, 1947

Country	Total population ¹⁴	Total employed	Private occupations	Government		Cooperatives
				Civilian	Armed services	
Australia	7,580,820	2,374,500 ⁸	1,785,200 ⁸	589,300 ⁸	55,500	
Austria	7,057,140	1,848,000	1,664,200	181,000		
Brazil	48,000,000	1,543,463 ⁹				
Canada	12,582,000 ¹	4,963,000	4,662,000	268,000	33,000	
Saskatchewan ..	895,992 ¹⁰	330,700 ⁸	300,000	12,200	14,500	4,000 ¹
Finland	4,100,000 ¹	3,261,000 ⁵				
Italy	46,110,000 ¹		16,386,400 ¹⁰	778,500 ¹⁰		300,000 ²
Mexico	23,876,343 ²	6,788,832 ³		117,406	59,974	223,120
New Zealand	1,802,623 ¹	718,900	566,367	143,333	8,189	1,000 ¹
Norway ¹⁷	3,123,338 ⁸		1,947,445	62,000	3,250	
Poland	24,775,000 ¹	3,700,000	857,000	2,667,000		187,000
Sweden ⁴	6,842,046 ²	2,755,820 ⁵	2,381,302 ⁵	316,820 ⁵	35,131	
Turkey	18,861,609 ⁶			222,166 ⁷		
U.S.S.R.	193,000,000 ⁵	169,479,121 ¹¹	4,414,253 ¹⁵	84,324,767		79,504,822 ¹⁹
United Kingdom ..	50,027,000 ¹	20,430,000 ⁸	16,803,000	2,200,000	896,000	327,962 ⁹
United States	143,414,000 ¹	57,700,000 ²	50,500,000 ²	6,700,000 ³		
California	9,812,000 ¹	4,016,000	3,534,000	482,000		
Illinois	8,397,000 ¹	2,874,431 ⁵		135,000 ⁸		
Mississippi	2,096,000 ¹			11,000		1,000 ¹
New York	14,165,000 ¹	5,370,800 ¹²	4,772,900	597,900		
North Carolina ..	3,698,000 ¹		722,000 ¹³			
Wisconsin	3,247,000 ¹		1,319,000 ¹			

¹Estimated. ²Estimated, 1948. ³Census,1946. ⁴Occupations not specified, 33,546.⁵1940. ⁶Census, 1945. ⁷1946. ⁸1948. ⁹1945.¹⁰Including families and 1,235,279 "not indicating social group"; based on 1939 census.¹¹1948; excludes agricultural workers. ¹²1946;excludes agricultural workers. ¹⁴Source:Encyclopaedia Britannica. ¹⁵Includes non-cooperative handicraft workers and individual peasants. ¹⁶Includes collective farm members and cooperative handicraft workers. ¹⁷1930. ¹⁸1941. ¹⁹Census, 1936.

EDUCATION

Country	Year for which figures apply	Number of students in:					Percentage of those of eligible age in:		% of literates	Ages of compulsory attendance
		Elementary schools		Secondary schools		Elementary	Secondary			
		Public	Private	Public	Private					
Australia	1943		(1)					29,074	97-99	to 14-16
Austria	1946-47		641,364		156,126			35,381	99+	to 14
Canada	1946	1,854,800	19,800	143,100	18,200			60,000	88 33 3	7-15
Saskatchewan		138,832	2,292	34,221	2,221			4,500	90 ¹⁰ 45 ¹⁰ 6 ¹⁰	7-15
China	1945		24,201,911						39.2	6-10
Finland	1945	419,064		36,178	46,421			11,810	99.08	7-15
France		4,109,306	913,307	549,509	319,525			137,808	71	to 14
Italy ¹⁷	1945-46	4,065,636	293,003	670,258	208,735			189,665	80	to 14
Mexico	1947	2,516,733	129,299	39,246	14,432			18,928	32	6-12
New Zealand	1946-47	231,565	31,929	45,414	10,182			13,508	99+	7-15 ⁹
Norway	1942-44	293,648	1,264	30,117	9,909			7,800	99+	to 15
Poland	1947-48	3,600,000	17,000	413,000	63,000					7-13 ⁴
Sweden			550,000		106,000			14,000	99.5	7-14
Turkey	1945-46	1,342,892	14,848	81,336	9,787			19,273 ⁹	(⁹)	7-12
U.S.S.R.	1947-48		(⁷)		(⁷)			670,000	81.2 ⁸	7-11 ¹⁴
United Kingdom	1947		(⁹)		(⁹)				99+	5-15
United States	1947-48	19,515,500	2,556,500	5,647,500	588,500			2,570,000	98 79 20 ¹¹	7-16 ¹³
California	1944		1,094,056						99	8-16
Illinois	1946		832,649		338,208					6-16
Mississippi	1946-47	470,012	7,148 ¹⁵	76,040	2,227 ¹⁵			19,500	93.4	7-16
New Mexico	1945-46	106,383	8,409	22,149	1,960					6-17
New York	1946-47	1,283,601	346,000	582,059	83,265			246,258		7-16
North Carolina	1945-46	680,636	3,488	132,863	2,032					7-14
North Dakota	1946-47	85,923	8,482 ¹⁵	27,361	1,579 ¹⁵			8,961		7-15
Texas	1945-46	968,098	53,397	278,355	10,299					7-16
Wisconsin	1945-46	342,327	115,014	141,919	16,050			50,695		7-16

¹Elementary and Secondary school students in public schools numbered 1,000,000; in private schools, 264,000. In addition, about 33,000 pupils who live in outback areas are educated by means of radio, pamphlets and lesson plans provided by the government. ²Of those between the ages of 19 and 29. ³Permissible from the age of 5. Total children under 6 attending schools in July, 1947, was 36,958. ⁴In industrial areas, from 6 to 13. ⁵In technical and professional schools run by the government, 53,781 students; non-government, 467 students. ⁶60% in towns; 40% in villages. ⁷Elementary and Secondary school students numbered 32,343,000. The Soviet system of education generally consists of the four-year elementary school which may be followed by the four-year junior secondary school, a part of the full ten-year secondary school. The first seven grades are free, after which there is a tuition fee. However, monthly allowances are paid to outstanding students, veterans and others, and many categories of students are exempt from tuition payments such as ex-partisans and veterans, citizens of Indi-

vidual Soviet republics in other Soviet republics, etc. There are also free secondary schools for working, rural youths which they may attend without quitting their jobs. ⁸According to the census of 1939: estimated 1948 is over 90%. ⁹Elementary and Secondary school students in government schools numbered 4,604,012; in private schools, 426,616. ¹⁰This figure excludes professional and technical schools. ¹¹1940 data on persons of 18-21 in school. At the present time, due to the large number of veterans in such institutions (approximately one-half of the total enrollment) there is no relation between college enrollment and the 18-21 year age group. ¹²As of estimate made Sept. 23, 1948 by U. S. Bureau of the Census. ¹³Most common, though this varies from state to state. ¹⁴In all urban centers and rural settlements the seven-year school is compulsory. ¹⁵Based on 1946 census. ¹⁶The State does not subsidize private schools; completely supports government elementary and secondary schools; and supports universities to the extent of 80% of their revenues.

CONSERVATION

AUSTRALIA. A conservation program covers an irrigation project, reforestation, construction of dams and conservation of natural resources. A cabinet minister is in charge of scientific and industrial research.

CANADA. The Department of Mines and Resources is the chief agency for conservation. Although the Provinces own most of the forests and are responsible for their protection and management, the State takes an active part through the Dominion Forest Service in the fields of lumber, wood products, paper, etc.

Wild life is protected by the Dominion Wildlife Service, the Lands and Development Service, and the Department of Mines and Resources. Reindeer herding is a function of the Northwest Territories and Yukon Administration.

In the Mackenzie District, miners' recorder offices are maintained to insure proper staking and recording of mineral claims and the administration of regulations. Various State agencies are making aerial maps and doing surveying of the mineral wealth of vast undeveloped or unknown areas. Mineral wealth includes lead, coal and petroleum.

Saskatchewan. Lands subjected to severe erosion are purchased by the State and conservation committees are sponsored and grant-in-aid provided for conservation projects. Technical and educational help is given.

Local government groups are allowed to withdraw private lands from cultivation if erosion on individual farms endangers the community as a whole.

Grazing regulations prevent overstocking of range lands.

Lake and forest resources are conserved by means of licensing and marketing controls.

Water conservation is carried on jointly by the Federal and Provincial governments in the form of irrigation projects and dugouts on individual farms. Water usage is licensed by the provincial government.

Mineral and oil regulations are designed to prevent wasteful exploitation.

FINLAND. The law prohibits cutting lumber without leaving seed trees or planting new forests on the area cut.

MEXICO. State prohibits excessive wood cutting in the forests. Reforestation of desolate areas, creation of national parks, soil conservation and crop orientation are encouraged.

NEW ZEALAND. Soil Conservation: Through its Soil Conservation and Rivers Control Council, the state insures that erosion is checked or rectified by decreasing flood dangers, reforestation, etc. In some cases eroded land is redeveloped.

Coal: The State is in the process of nationalizing all coal resources to avoid waste and to pursue a coordinated and economic policy for the extraction and conservation of coal.

Forestry: State owns 77% of exploitable forest land and insures that depleted forests are quickly replenished by the planting of new trees reared in State nurseries. An intensive fire precaution campaign is carried out.

NORWAY. There are laws regarding the cutting of trees, reforestation, etc., to prevent overtaxa-

tion of forests. Concessions are made for the development of water falls.

POLAND. Forests have been protected since prewar by a forest protection bill which does not allow the yearly cut to surpass the natural increase of trees. Other services are improving navigable rivers, conserving fish and game.

SWEDEN. For conservation of natural resources, several laws regulate forestry, hunting, fishing and the use of water power and other water resources. Forest cutting is regulated by law and balanced by planned reforestation. Several State agricultural and forestry research stations experiment with new conservation methods. The State Geological Survey cooperates with private enterprise in prospecting for mineral deposits.

U.S.S.R. To 1918, only 10.2% of Russia had been geologically surveyed, and exploitation of natural resources was inconsequential. However, the U.S.S.R. has instituted widespread programs for conservation for the use of the country's undeveloped natural wealth.

There are more than 90 preserves covering an area of about 12 million hectares, which are concerned with preserving areas of nature typical for a given geographical district; conserving, restoring and increasing the quantity of valuable animals and plants; conserving forests for maintaining water systems and climatic conditions of the given regions; the study of the natural re-

sources of the preserves; acquainting the people with the preserves by means of tours and excursions.

UNITED KINGDOM. The Agricultural Land Commission, set up in Dec., 1947, under the Agricultural Act of 1947, is responsible for full agricultural use of the land, including large-scale development and reclamation schemes. Under the Act, the State can take over and apply capital to land that would otherwise be left to yield less than its maximum output. Estimated cost of land drainage schemes in England and Wales approved for State aid up to Mar. 31, 1947: Farm drainage (since 1940), over £11 million; Main arterial drainage (since 1947), nearly £7½ million; Main rivers (since 1930), nearly £17½ million.

Provision for the rehabilitation of hill farming land is made under the Farming Act of 1946.

A 50-year forest program designed to increase Britain's forest area from 3 to 5 million acres has been proposed by the Forestry Commission. For this purpose, the State is to subsidize and do custom work for the private forest owners as well as insure that the increase in forest area will take in only land unsuited to farming.

UNITED STATES. Among the phases of conservation under Federal administration or supervision are forests and reforestation; bird, game, fisheries and wild life; soil erosion; irrigation and reclamation; water power and navigability; and flood control.

SUFFRAGE: QUALIFICATIONS FOR VOTING

All countries answered that all citizens of voting age, both men and women (except Mexico where women do not have the right to vote), had the right of the ballot; except Australia where voting is compulsory, failure to vote punishable by fine. In 7 Southern States, in the U. S., a poll tax is required before a person may vote.

COMPOSITION OF GOVERNMENTAL CABINETS

(Editor's note: for further election information see Index under individual countries.)

AUSTRALIA. All cabinet members are of the Labour party.

AUSTRIA. People's party, 8; Socialist party, 7; Independents, 2.

BRAZIL. The cabinet has the following membership: 4 of the Democratic party; 2 of the National Democratic Union party; and 1 Republican.

CANADA. All are of the Liberal party.

Saskatchewan. All are of the Cooperative Commonwealth Federation.

CHINA. Kuomintang, 17; Young China party, 4; Independents, 2.

FINLAND. Social Dem's., 15; Independent, 1.

FRANCE. Of the 15 Ministers in the 32-man cabinet: Radical Socialists, 3; Popular Republicans, 5; Socialists, 5; Republican Liberal, 1; Union of Resistance, 1.

ITALY. The majority of the cabinet members belong to the Christian Democratic

party. Other members are Socialists, Social Democrats, Republicans, Liberals and Independents.

NEW ZEALAND. All are of the Labour party.

NORWAY. All are of the Labor party.

POLAND. Polish Socialists, 7; Polish Worker's party (the successor to the Polish Communist party and a member of the Cominform), 5; Peasant party, 5; Democratic party, 3; Labor party (part of the Democratic bloc in the recovered territories), 2, 1 with no party affiliations.

SWEDEN. All of Social Democratic party.

TURKEY. All of People's Republican party.

U.S.S.R. The Council of Ministers are all of the All-Union Communist party.

UNITED KINGDOM. All of Labour party.

UNITED STATES. The cabinet usually includes only members of the President's party. The same is generally true in the states.

SOCIAL WELFARE AND SOCIAL INSURANCE

Country	Old-age pension	Old-age assistance	Unemployment insurance	Health insurance	Accident or disability insurance	Free medical service	Widow's allowance	Maternity allowance	Aid to blind	Aid to children	Government employees pension
Australia	yes	no	yes	yes	yes	yes	yes	yes	yes	yes*	no
Canada	yes	no	yes	yes	yes	yes	yes	yes	yes	yes†	yes
Saskatchewan	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
China	no	no	no	no	no	no	no	no	no	no	yes
Finland	yes	yes	yes	yes	yes	yes	...	...	yes	...	yes
France	yes	yes	...	yes	...	...	...	...	...	...	...
Italy	yes	yes	yes	yes	yes	...	...	yes	...	...	...
Mexico	yes	yes	no	no	yes	yes	...	yes	...	yes	...
New Zealand	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Norway	yes	...	yes	yes	yes	yes	...	...	...	yes	yes
Poland	yes	no	no	yes	yes	yes	yes	no	no	yes*	yes
Sweden	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes†	yes
Turkey	yes	yes	no	yes	yes	yes	yes	yes	yes†	yes†	yes
U.S.S.R.	yes	yes	...	yes	yes	yes	yes	yes	yes	yes*	yes
United Kingdom	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes*	yes
United States	yes	yes	yes	no	yes	yes	yes	no	yes	yes	yes

*Dependent children. †All children. ‡By private charitable organizations.

AUSTRALIA. The funds from which benefits are paid are derived from a consolidated progressive tax levied on all income over £A104 for the unmarried and £A200 for married men with exemptions for children.

Old-Age Pensions: Men over 65 and women over 60 who have resided in Australia for 20 years, and are of good character, are eligible to receive 37s. 6d. per week. 252,634 persons received pensions in 1945.

Unemployment and Sickness Benefits: Men between 16 and 65 and women between 16 and 60 are eligible. Active participants in strikes are not eligible. Waiting period in case of sickness is 7 days. Benefits, depending upon age, marital status, number of children, etc., range from 15s. to £A2 10s. weekly. In 1947, 10,000 persons received unemployment insurance and 9,000 were given sickness benefits; cost: £A1,750,000.

Invalids' Pensions: All invalids over 16, resident for 5 years, who are 85% disabled, receive 37s. 6d. per week, but this varies with the cost-of-living index. Other income up to 20s. per week and property ownership to £A59 is allowable. In addition, a wife receives 25s. and another 5s. for one child under 16. Latest figures had 358,000 recipients of pensions.

Health Insurance: Granted for the duration of the illness. In 1947, 56,028 received benefits. Free medical care and medication, which was not compulsory, became available June 1, 1948, pharmacists being reimbursed by the State. 6s. a day is paid to a public ward patient in a public hospital, the same amount being paid to the hospital. The Commonwealth provides £A50,000 a year, as do the several States, for diagnostic treatment and after-care facilities.

Maternity Allowance: £A15 for the birth of the first child is paid; £A16 for the second or third; 17s. 10d. thereafter. In 1947, maternity allowances of more than £A3,000,000 were granted for 197,000 children.

Child Endowment: For each child under 16, 7s. 6d. weekly is paid. Endowment is now paid for one million children to 550,000 families and 342 institutions.

Widows' Pensions: Widows over 50 without children under 16 receive 27s. weekly; those with one or more children under 16, receive up to 37s. 6d. weekly; those under 50 with no children receive up to 37s. 6d. weekly for 6 months after widowhood begins.

CANADA. Old-Age Pensions: Paid to persons of 70, resident of 20 years, whose annual income, including pension, is not more than \$600, if single, \$1,080, if married, or \$1200 if married to a blind person. Funds are collected from the Dominion and the Provinces. Since 1942, various Provinces have added supplemental allowances. In 1948, 229,158 persons received old-age pensions.

Unemployment Insurance: Covers all workers except: those engaged in their own businesses; those employed in agriculture, horticulture, lumbering, domestic service, etc.; and salaried employees earning over \$3,120 per year. Benefits range from \$4.20 to \$12.30 per week for a single person, to \$4.80 to \$14.40 for a person with a dependent, according to the average rate of contribution during the two preceding years. Employers and employees pay equally from 9 to 42 cents weekly; government contributes an amount equal to one-fifth of the total from the other two sources. Last year, the number of claims allowed was 492,922.

Health Insurance: See Saskatchewan.

Health Services: Includes free medical services for veterans suffering from war-incurred disabilities; for members of the armed services; for mariners; for Indians and Eskimos. Beginning in 1948, the State will expend over \$30 million annually, or \$2.41 per capita, to develop Provincial health services.

Provincial Health Services: Provincial health authorities supervise municipal programs and provide services in areas without municipal organizations. The Provinces offer the usual services for the cure of diseases: set up laboratories; health centers; provide maternal and child hygiene; offer free medical care and give financial aid to local hospital committees. In British Columbia, case work and medical services are provided for all persons receiving social assistance. Alberta provides hospital and medical services to pensioners and their dependents.

Other Forms of Insurance: A pension is paid to a blind person of 21 or over if his income, including the pension, is not more than \$720 if single, \$920 if he has a dependent child, \$1,200 if married or \$1,320 if his wife is also blind. In 1948, 8,476 persons received such pensions.

A family allowance is granted to the mother, regardless of her means, of every child under 16 born in Canada or resident for at least 3 years. For the first 4 children, allowances are made at a monthly rate of: \$5 for each child under 6; \$6 for each from 6 to 9 years of age; \$7 for each from 10 to 12; and \$8 for each from 13 to 15. When there are 5 or more, the allowance is reduced. In 1948, allowances were \$263,956,505 to 1,669,944 families for 3,755,572 children.

Allowances are provided by all Provinces, except Prince Edward Island, for widowed or indigent mothers.

Saskatchewan. Old-Age Pensions: Men and women over 70 are provided for. As of Aug. 31, 1948, there were 15,415 people receiving government old-age pensions, toward which the government paid 75% and the Provincial government 25% plus administration costs. Saskatchewan also provides a \$5 cost-of-living bonus and free medical, hospital, dental, optical and nursing care and drugs to pensioners. Excluded are single persons earning more than \$600 per year and married couples earning more than \$1,080.

Unemployment Insurance: The Federal government operates a national unemployment insurance plan.

Health Insurance: There are three programs: (1) a pre-paid hospital care program; (2) a medical care program in Health Region No. 1; and (3) the Municipal Doctor Plan which is based on individual contracts. Approximately one-quarter of the residents have this plan.

Services rendered under program 1, which is for all residents, are public ward care, surgical dressings, drugs, use of operating and case rooms and x-ray treatment and

physiotherapy. No limit on number of days care. Under program 2, complete medical and surgical care including referral to out-of-region specialists is offered. Under program 3, the benefits vary with the community, but the standard provides for general practitioner service and major surgery.

Contributions to program 1 are mainly personal tax; for program 2, by personal tax (higher than [1]) and land tax; for program 3, by land tax for the most part.

The government provides, apart from these programs, for free treatment for cancer, tuberculosis, mental illness, venereal disease and poliomyelitis.

A unique service is the Air Ambulance which, in its first 2 years of operation, carried more than 800 patients from isolated points to hospitals. A flat fee of \$25 per flight is levied but indigent persons are not required to pay.

Other forms of Insurance: Automobile Accident Insurance: All vehicle owners and operators pay a premium to the government when they purchase their licenses and operators permits. Out of this fund, benefits are paid to all residents who are victims of automobile accidents, regardless of the factor of ordinary negligence. Residents riding a vehicle of Saskatchewan registry anywhere on the North American continent are also covered. The maximum benefit payable to any one individual is \$10,000; vehicle owners are provided with public liability insurance up to \$10,000 and with collision and property damage insurance up to \$1,000 subject to a \$100 deductible clause.

Mothers' Pensions: Allowances are provided to widows with children under 16 years of age if the widow's income is below \$540 per year. Divorced mothers, unmarried mothers, mothers with incapacitated husbands and incapacitated widowers with children are also eligible.

Maternity Pensions: To encourage expectant mothers in remote areas to have medical care, the government provides maternity grants to indigent mothers living in those areas. The grant covers prenatal and postnatal care and includes a small cash grant for the purchase of a layette.

Dependent Children: Provided mostly through Mothers Allowances, but the government also looks after orphaned, neglected and illegitimate children. Efforts are made to place these children in homes and they are institutionalized until that time.

CHINA. Social Insurance: A pension system for government employees is provided.

Health Services: There is a State medicine system set up, founded on *hsien* (county) health systems, highway health systems and border stations. The National Health Administration hopes to extend organized medical and public health service throughout the country. The present plan provides that a *hsien* health center is to be established by every *hsien* government under the guidance of the Provincial health department.

FINLAND. Old-Age and Disability Insurance: Are compulsory and extend to every able-bodied resident over 18 years of age. The systems are financed partly by a tax on worker's income (2%, the employer paying half) and partly by the government.

Old-age pensions are paid when insured reaches 65; disability pension if he becomes totally disabled. On the death of an insured person, contributions to his credit are repaid to his widow and children under 18—not more, however, than 15,000 marks, not less than 500. In 1946, 8,000 persons received disability pensions, of whom, however, 5,000 received supplementary pensions also. The amount paid out was 40 million marks.

Insurance Against Sickness: In 1945, voluntary sickness insurance was provided by 255 friendly societies with an aggregate membership exceeding 100,000. 60 million marks were paid out in benefits. The societies collected 48 million marks from their membership fees and 14 million marks from employers.

Accident Insurance: Statutory policies are provided by 23 insurance companies. Compensation for occupational diseases is paid for accidents occurring in government work. Cash, medical care and economic rehabilitation are provided, as well as measures for enabling a disabled person to earn his own livelihood.

Health Services: In the fight against tuberculosis, State and communes furnish microscopic and x-ray examinations and Calmette inoculation. The State often defrays the cost of treatment for venereal disease.

Widows' and Orphans' Funds: Voluntary benefit funds provide annuity insurance for widows and orphans. In 1945, 6.5 million marks were paid out to 3,200 persons.

FRANCE. Health Services: A government system of health insurance covers health services, including dentistry for all persons receiving salaries (including agricultural workers). The patient pays the doctor or pharmacist and the government refunds 80% of the cost. This is financed by a 5 or 6% tax on paychecks supplemented by the State.

The French hospital system consists of privately-run nursing homes and State hospitals. There are 94 psychiatric hospitals in France.

The State enforces a certain number of compulsory measures: declaration of infectious disease, including venereal disease; treatment; vaccination; routine check-ups for workers so as to try to eliminate forms of disease resulting from certain types of work.

The State provides routine check-ups for school children, pregnant women and workers subjected to certain occupational diseases.

ITALY. Old-Age Pensions: Social Security is worked out through such agencies as the National Institute for Social Welfare, National Institute of Insurance against Diseases and National Institute of Insurance against Occupational Injuries. Old-age in-

surance is compulsory. The insurer is always the employer, but the State makes a financial contribution.

Pensions are paid to all men over 60 and women over 55. As of Nov., 1947, 1,269,000 received benefits.

Unemployment Insurance: Is compulsory. To obtain unemployment insurance, it is necessary to be registered through the Collocations Office. Automatically excluded from unemployment insurance benefits are those who work at home, janitors and domestic workers. As of Nov., 1947, 161,277 employees have received insurance.

Health Insurance: Is compulsory. Sickness benefits cases totaled 150,482 in Jan., 1948; hospital days totaled 460,896 for working men and 235,636 for their families.

Insurance against tuberculosis is under the jurisdiction of the National Institute for Social Welfare. As of Dec., 1947, there were 27,839 working men using sanitariums and 14,692 using clinics; 12,075 of their families used sanitariums and 4,686 used clinics. Five million lire was paid out as insurance benefits to insured whose insurance did not cover family benefits; 26 million lire to insured whose insurance carried family benefits and 115 million lire to those discharged from sanitariums.

The State High Commission for Hygiene and Public Health is working out a program of national reconstruction embracing the following points: (1) improvement of services for combatting infectious diseases and improvement of the prevention of imported diseases, (2) combatting against social or contagious diseases such as tuberculosis, malaria, venereal disease, cancer, trachoma, poliomyelitis, rheumatic illnesses, (3) reconstruction and rehabilitation of the general hospital system and special hospitals. Reorganization of pharmaceutical assistance, particularly in the realm of antibiotics, (4) improvement of urban and rural health conditions, (5) education and publicity regarding hygienic and sanitary matters, (6) continuance of active scientific research, especially in the realm of prophylaxis.

Other Forms of Insurance: Family Insurance: 1.91 million lire was spent for 3,148 families as of Nov., 1947.

Maternity Insurance: 2.95 million lire was spent for 9,608 mothers as of Nov., 1947.

Whole Family Insurance: 5,402 million lire spent for 3,790,000 families as of Nov. 1947.

Occupational Injury (including those recalled to the service): 17 million lire was spent for 431,214 such cases as of Nov., 1947.

MEXICO. Sanitation projects have been intensive both in cities and rural areas, having achieved the eradication of epidemics, formerly common. General mortality, as well as child mortality, has been lowered.

Old-Age Pensions: All persons over 65 are provided for in the Social Security Law. In 1947, 354,440 persons received old-age assistance, the government contributing one-third, the employees, 17%.

Unemployment Insurance: Anyone 60 years old may receive a pension at reduced rates if involuntarily deprived of remunerative work.

Health Insurance: The State insures against occupational accidents, illness and non-occupational illness which incapacitate the individual.

Other Forms of Insurance: These cover: total and permanent disability; partial permanent disability; death.

In case of occupational accident or illness, the insured has the right to these services: medical, surgical, pharmaceutical, orthopedic and prosthetic apparatus. One incapacitated for work, receives a subsidy.

Maternity Allowance: The insured woman obtains necessary pre- and postnatal care: monetary allowances equal to that which corresponds to non-occupational illness, during 42 days previous to parturition and 42 days following; also receives an increase for 8 days previous to parturition and 30 days following, guaranteeing her 100% of her normal salary; aid for nursing period is given up to 6 months after parturition, paid to the person caring for the child.

Insurance for Minors: Minors under 16, whose parents are insured, receive medical, surgical and pharmaceutical services.

NEW ZEALAND. Old-Age Pensions: State system provides two forms: the age benefit and universal superannuation. A person 60 or over, resident for 10 years, is granted an age benefit of £2 5s. a week which is increased to £4 10s. if his wife is not qualified for the pension. An additional income of £1 a week is allowed. Age benefits are being received by 117,161 persons.

Persons 65 or over, resident for 10 years, who receive no age benefits, are eligible for universal superannuation, which is £30 a year to be increased annually. 61,612 persons now receive such payment.

Persons 16 years or over contribute 7½% of their income. This covers all social security benefits.

Unemployment Insurance: Paid to persons 16 or over, resident a year, and able and willing to take suitable employment. 380 persons received £2 5s. a week, if single and over 20 years of age, and £4 10s. if married.

Health Insurance: Includes sickness benefits for temporary and permanent incapacity. Hospital treatment, x-ray, massage, maternity care and pharmaceuticals are free; fees for doctors and specialists are partly recoverable. Sickness benefits amount to £1 5s. a week for persons 16 to 20 without dependents and £2 5s. for all others. A limited additional income is permitted.

Invalids' benefits are paid to those totally blind or incapacitated for work.

Allowances for Women and Children: Benefits are payable to deserted wives, wives whose husbands are receiving treatment in mental hospitals and widows. The woman is required to have dependent children or

to meet other requirements that indicate that the marriage has deprived her of ability to earn a livelihood in the competitive market. The rate of benefit is £2 5s. a week; a separate income of £1 10s. is permitted. When there are dependent children, a mothers' allowance of £1 5s. a week is added.

Any child born in New Zealand, or resident for 12 months receives 10s.

Orphans receive £1 weekly minus any other income received for orphan's maintenance.

Other Social Insurance: A person who has worked in the mines for a specified period and is permanently incapacitated, receives £2 5s. weekly, to which is added a like amount for the miner's wife. No deduction is made from miner's benefits because of other income or property.

An emergency benefit may be granted in case of hardship that renders a person unable to earn a livelihood for himself and his dependents, if he is not qualified to receive other benefits.

NORWAY. Old-Age Pensions: Paid to citizens over 70 and to married couples where one spouse is over that age, provided other income does not exceed a certain level. 175,000 or 70% of that age level are beneficiaries.

Local governments provide 12.5%; the State, 37.5% and the Old-Age Fund, 50% (a 1% tax on certain income plus taxes on companies).

Unemployment Insurance: Covers all workers over 15 whose annual income is not more than 9,000 kr. Domestic servants and agricultural workers and foresters and fishermen are excluded. Premiums are paid by the insured and their employers, but government contributes.

Health Insurance: Covers loss of income due to illness for most workers, provides free medical attention and hospitalization. Voluntary insurance is also provided for anyone. Dependents of insured also receive assistance. Of 1,569,000 persons insured, in 1945, 350,000 (25%) were voluntary members.

Accident Insurance: For industrial workers, sailors and fishermen, and covers free hospitalization and compensation for loss of income. Premiums are paid by employers.

Insurance for Children: Pays an allowance of 180 kr. a year for each child excluding the first. Seven-eighths is paid by the State and one-eighth by local authorities. The program covered 430,000 children at a cost of 68,000,000 kr., in 1947-48.

POLAND. Old-Age Pensions: Workers over 65 are entitled to pensions. Those permanently disabled because of an accident at work or occupational disease also receive pensions.

Under social insurance, grants are being received by 414,200 persons. All workers, students, apprentices and home workers are covered. Employers, alone, contribute

to the fund, the average payment being .1% of the payroll.

Health Insurance: Covers all employees, their families and all pensioners. Insured receives 70% of his wages and 5% for each child, the payments lasting for not more than 26 weeks from the first day of illness. If in a hospital, he receives 50% of his allowance. The insured and his family also receive free medical treatment, hospital care, obstetrical and dental services, medicines, etc. Premiums are paid by employers.

Other Forms of Social Insurance: Widows and children receive pensions, as do war orphans. Government provides support for children up to 16 to 21, if in school, and to 24, if at college. The amounts granted are 50 zlotys for one child, 1,450 for 2 children, 2,000 for every next child beginning with the third, 300 for a childless wife, and 500 for a wife who has children. This is paid by the employer, the rate being 10% of the average payroll.

A miner receives, in addition, a supplementary pension paid for by the employer.

SWEDEN. Old-Age Pensions: Since Jan., 1948, everyone is eligible at 67, regardless of income. Single persons receive 1,000 kr. housing supplement is added, the amount depending on the income.

Unemployment Insurance: Voluntary and administered by labor unions but subsidized by the government. Applicant must be capable of work, unemployed through no fault of his own, and a regular contributor to the fund. He need not accept unsuitable work but is barred if on a wage strike. Amount paid is not greater than the average local daily wage (not to exceed 7 kr., plus 1 kr. per child and 1.25 kr. for spouse or housekeeper) for 90 to 156 days. By 1945, 33 unemployment funds covered 20,000 members.

Sickness Insurance: Under a recent law, there will be 3,800,000 members, and others will be covered as relatives of members. Compensation includes: free hospitalization, 75% of doctor bills, 50% of medical bills and for loss of income from 4th day to the end of the second year. Members pay from 1 to 24 kr. a year, depending upon the benefits to which they will be entitled.

Accident Insurance: Carried by the employer and covers occupational diseases. Doctor bills, medicine, loss of income and permanent disability are paid for. If worker dies, family receives burial allowance and life annuity.

Invalids' Pensions: Paid at same rate as old-age pension to person under 67, unfit to work, the amount subject to a means test. Supplementary allowance paid to the blind under 60, regardless of income. Sick-ness allowance is granted at same rate as invalids' pension for fixed periods after a year's illness.

Health Services: Includes preventive medicine and medical care. Only larger cities are outside jurisdiction of district health officers. District physician must render

medical services to the inhabitants for fixed nominal fee (less than \$1). He must, without charge, supervise public health conditions and care of infants, young children and expectant mothers; also take measures to prevent tuberculosis, supervise health in schools and treat cases of venereal disease.

Hospital and sanatorium care is provided by local government; patients may not return to private physicians until discharged. There are also many low-cost clinics.

Maternity Benefits: Varies from 110 to 125 kr. and is paid for each child, regardless of economic status. Maternity relief allowances are granted as loans or gifts where loss of mother's income results in economic distress. Maximum is 400 kr. for one child, 500 kr. for twins.

75 kr. is paid for each child born if family income is less than 2,500 kr. annually; 95% of new mothers collect this bonus.

Other Forms of Insurance: A wife of 60, married at least 5 years, receives 200 kr. less than given in full benefits. A widow of 55, married at least 5 years, receives a pension, the amount depending on other income.

All children between 1 and 16, irrespective of parents' income, may receive 260 kr. a year.

Young married couples are granted loans to establish homes. Loans and scholarships are made to university students.

TURKEY. Health Insurance: All workers except agricultural and marine personnel, employed by establishments hiring 10 or more, are eligible for occupational disease and accident insurance. A worker receives full treatment and 75% of his daily earnings. The wife of a worker who dies from an occupational disease or an accident is paid pension equal to 30% of his wages and another 15% for each child, the total not to exceed 60% of the worker's earnings.

If totally disabled, a worker receives a pension of 60% of his previous earnings. The insurance fund is paid by employers only.

Health Services: Aims to extend and improve medical facilities and personnel and to establish health insurance.

Other Forms of Insurance: Women workers and workers' wives, receive free prenatal examination and aid and care during childbirth. Women are paid 70% of daily earnings for each day of absence during pregnancy and after birth; any resultant illness is treated free.

U.S.S.R. Old-Age Pensions: Covers all men 60 or over with 25 years of service. Those over 50 employed underground or in unhealthy work are entitled to pensions after 20 years of service, 10 of which were underground work. Amounts vary as follows: a worker in underground or unhealthy work receives 60% of his income; one in basic industries receives 55%; and in other work and white collar occupations, 50%. The pension is paid even if he continues to work.

Unemployment Insurance: Abolished on Oct. 10, 1930 because unemployment had been eliminated in the U.S.S.R.

Health Insurance: Sick benefits are paid from first day of disability until recovery or until permanent disability is established. Benefits vary with income, occupation, length of service, trade-union membership and age. The amounts run from 50 to 100% of former income.

Benefits are also paid when a worker must care for a sick member of the family provided there is no alternative. If a child under 2 is sick, the mother is entitled to a leave with benefit, even though another member of the family may be at home to care for the child.

Health Services: Medical and dental care are free. Medical services are socialized; all hospitals, rest homes and sanatoriums are socially owned. About 98% of doctors and nurses are civil servants. A sick person may send for or visit a doctor at his factory, farm or polyclinic; he may call in and pay any physician on a private basis. Specialists and treatment in hospitals are free.

Mothers' Pensions: State allowances to mothers of large families and to unmarried mothers are paid out in amounts varying from 200 rubles for the third child and 650 plus 40 rubles a month for the fourth to a 2,500 single grant plus 150 a month for every child after the 10th.

Maternity Insurance: Includes free prenatal care, with special diets, lighter work assignments after six months of pregnancy (with no reduction in pay), a paid maternity leave for 35 days before and 42 days after birth, a shorter working day during nursing period, a layette, and a 9-month allowance for milk and extra clothes, for industrial and office workers, employed professionals, etc. Collective farm women receive a month's leave both before and after birth, and are paid one-half their average earnings. Housewives (non-working) get free hospitalization.

Dependent Children: Children's homes care for the millions of orphans, but adoption is encouraged. With the increasing number of working women, nurseries for children from the 28th day after birth to 3 years, became important. In the cities, children in nurseries increased from 53,000 in 1938 to 554,000 in 1941; in the country, 45% of nursery-age children were in permanent and seasonal nurseries. Nurseries are paid for by contributions from the general budget of trade unions and enterprises; 15% is paid by the parents. Summer camps are provided by trade unions. Children of servicemen and war invalids have priority.

Kindergartens provide for children from 3 to 7.

Survivors' (deceased insured person) pensions are payable to those who are dependents of deceased: children, brothers and sisters under 16 (18 if at school) or without age limit if incapable of working; father,

mother, and wife or husband if they are incapable of working or are aged; or irrespective of age, if engaged in looking after deceased person's children, brothers or sisters under 8 years of age.

Group Insurance: For collective farmers and other nonsalaried workers unable to work because of age or physical disability, funds are provided through mutual benefit societies. Rules of collective farms provide that 2% of gross income be set aside for this fund. Rest homes for the sick and aged are provided.

Since social insurance does not cover members of collective farms, such services are rendered by the mutual aid funds. The finances are composed of entrance fees, contributions proportionate to individual earnings, a certain percentage from the funds of the collective farms and sums received from the Soviet Assistance authorities for payment on invalidity pensions.

The workers' productive cooperatives and the disabled persons' cooperatives have their own mutual insurance funds organized into regional and Republican federations of their own.

Administration: By trade unions, which draft a budget for social insurance to be approved by the Supreme Soviet. Most expenditures are covered by contributions from institutions, organizations and persons employing domestics.

Social assistance (out of State and local budgets) is given persons not working for remuneration who are in need—mainly invalids (labor and war), families of invalids and the blind, deaf and mute.

UNITED KINGDOM. Comprehensive insurance schemes were introduced by the National Insurance Act of 1946 and the National Industrial Insurance (Industrial Injuries) Act of 1946, which came into operation on July 5, 1948. The schemes are financed by contributions from insured persons, their employers, and the Exchequer.

Retirement Pensions: Men of 65 and women of 60 receive 26s. a week with increases if they postpone the age of retirement. There is, in addition, 16s. a week for an adult dependent and 7s. 6d. a week for one child under the school leaving age.

Unemployment Benefit: Pays 26s. a week for 180 days, with 16s. a week for an adult dependent and 7s. 6d. a week for one child under school leaving age. Further days of benefit depend on contribution record. Cases of those who have run out of standard benefit are reviewed by local tribunals.

Health Benefit: Payable to employed and self-employed persons who have paid contributions for an unlimited period. Benefits for dependents and children as for unemployment.

Industrial Injury Benefit: Payable at rate of 45s. a week for a maximum period of 26 weeks. Thereafter disablement benefit varies from 9s. to 45s. a week, depending on the extent of disablement assessed by the Medical Board.

Allowances for a dependent adult and a child are as for sickness benefit. There are supplements for those permanently unfit for work.

Health Services: General practitioner, specialist, auxiliary medical, hospital and rehabilitation services are provided without charge to those who wish it.

Other Forms of Insurance: Various benefits are payable to one or more of the following groups: (1) employed persons; (2) persons working for themselves; and (3) persons not gainfully employed.

Maternity allowances are payable to groups 1 and 2 at 36s. a week for 13 weeks. Allowances of 20s. a week for 4 weeks for attendance on confined women are payable to group 3.

Family allowances are payable to a mother for each child after the first at the rate of 5s. a week for each child.

A maternity grant consisting of a lump sum of £4 is payable to groups 1, 2 and 3.

A death grant varying from £6 to £20 is payable to all groups. A widows' allowance of 36s. a week for 13 weeks is payable to all groups. A widowed mothers' allowance of 33s. 6d. is payable to all groups and is made after expiration of the widows' allowance if there are dependent children of school age. A widows' pension of 26s. a week is payable to all groups and is made to widows over 50, but younger widows may receive it after the expiration of the widows' allowance if they are incapable of self-support. A guardians' allowance of 12s. a week is payable if an orphan of school age is living in a family.

Benefits Other than Monetary: For mothers—domiciliary midwife service, home help for and after confinement, priority on foods and extra vitamins; for children aged 2 to 5—nursery schools where available, food priority, free medical attention; for older children—free school medical services, ration priority, free milk and free or cheap meals at school; for young persons—further education, free medical care.

UNITED STATES. Old-Age Pensions: Under the Social Security Act, the U. S. had a Federal system of Old-Age and Survivors' Insurance (OASI) for industrial and commercial workers and railroad workers. (See also pp. 369-371.)

Unemployment Insurance: The Federal Social Security Act provides basic systems of insurance, each state having its own provisions. (See also pp. 371-374.)

Health Services: In general, hospital care is given to tuberculars, mental and nervous cases and the needy by State and local governments. (See also p. 375.)

Other Forms of Insurance: OASI and the program for railroad workers pays survivors' benefits to: children under 18; widows with children in their care; widows 65 or over; and aged parents who had been chiefly supported by the worker, provided he did not leave a widow or child who could ever qualify for such benefits. In December, 1947, monthly benefits were paid to 812,900

survivors under the OASI program and to 78,600 survivors under the railroad plan.

Each State pays workmen's compensation to injured employees and to dependents of workers killed by industrial injury or, in some States, disease. (For details of unemployment insurance of the various States, see p. 373.)

California. Old-Age Pensions: In addition to Federal OASI, benefits any person at 65 who has resided in the state for 5 of the past 9 years and owns no property exceeding \$600 and no realty exceeding \$3,500. May receive not more than \$65 a month.

Illinois. Old-Age Pensions: In addition to the Federal OASI, a pension is given to any person 65 who has lived in the state for at least a year and has neither a spouse nor children able to offer support.

In July, 1948, 126,968 persons were receiving an average of \$43.66 a month, the maximum monthly grant being \$50 plus medical care.

Other Forms of Compensation: Aid to dependent children is limited to those under 16 (or 18, if at school) whose parents are physically or mentally incapacitated. In July, 1948, an average monthly grant of \$38.42 per family was made to 55,571 children in 21,874 needy families.

Assistance is given to needy blind persons over 18 if they have lived in the state for at least a year and if their families cannot provide for them. In July, 1948, average monthly grants to 4,460 blind persons amounted to \$44.70.

General relief is granted to needy persons not dependent on public assistance but who cannot meet expenses of long illness. In July, 1948, 63,000 persons received an average monthly grant of \$54.50.

Mississippi. Old-Age Pensions: None except OASI, but in June, 1946, assistance was granted to 30,787 persons at an average of \$16.92 a month.

New York. Old-Age Pensions: None except OASI, but a Federal-State-local setup granted a pension to 112,000 persons 65 or over who have no other means of support.

Other Forms of Compensation: Aid to dependent children under 16 (18, if at school) includes shelter and all necessities and is granted only when the parents or guardians cannot support the child. Most recent figures show 105,800 children receiving aid. This program, together with aid for the blind, is carried on in conjunction with the Federal government.

North Carolina. Old-Age Pensions: Besides the OASI, there is a self-insuring workmen's compensation fund.

Health Insurance: None but dependent children and the blind are covered.

Health Services: The state lends money to medical, dental, pharmaceutical and nursing students who pledge 4 years of service in rural communities.

North Dakota. Old-Age Pensions: Besides OASI, the state has a system of insurance

which taxes each employee 1% of the first \$3,000 he earns with a like amount contributed by the political subdivision. Benefits vary from \$10 to \$85 a month, for wife or widow, children under 18 and parents over 65. Grants for funeral expenses are also allowed. Persons may receive both Federal and state benefits.

Other Forms of Compensation: A monthly cash payment is made for the support of needy children, and blind persons under 65 who are in need. Medical service is offered to all, regardless of age who need it to save or restore sight.

Texas. Old-Age Pensions: None except OASI.

Wisconsin. Old-Age Pensions: Besides OASI, the state gives assistance to persons 65 or over, resident for at least 1 year, who together with his spouse, does not own property over \$5,000 in value. In June, 1948, average monthly payments of \$37.71, as well as hospital, medical and nursing care, were given to 47,806 persons. The maximum amount is \$50.

Health Insurance: In 1947, workmen's compensation for injuries and occupational disease covered more than 925,000 employees working for more than 54,000 employers who bear the cost. It covers medical care and cash up to 70% for wage loss. Rehabilitation training is provided if necessary, and death benefits and aid for de-

pendent children are furnished. In 1947 34,140 cases were settled.

Health Services: Treatment for venereal disease patients is furnished at no cost. Several plans for voluntary prepaid medical, surgical, obstetrical and hospital care are in operation under the approval of the State Medical Society.

Other Forms of Compensation: Aid may be granted to a mother or other relative caring for children dependent on the public for support; to a mother whose husband has divorced or abandoned her, if incapacitated to unmarried mothers; and to children living in a foster home. No period of residence is required. During June, 1948, payments were made to 7,560 families for 18,932 children living in their own or relatives' homes, and to 1,050 children living in foster homes. The average grant to families was \$85.71 to children in foster homes, \$34.65.

Aid to needy blind persons 18 or over resident for at least 1 year, is provided. Present maximum grant is \$60 a month. During June, 1948, 1,290 persons received an average of \$39.87.

Aid up to \$80 a month may be granted to persons who are found to be so disabled as to require care. They must be in need, be citizens of the U. S., and have lived in the state at least 1 year. In June, 1948, 52 persons received an average of \$58.13 a month.

HOUSING

AUSTRALIA. Of the 1,995,736 dwellings, in 1947, 1,913,937 were occupied; all essentially privately-owned except in Canberra, where most were state-owned. 34,758 houses were under construction.

AUSTRIA. Of the 1,947,266 dwelling units, in 1946, 75,959 were destroyed during the war and 3,768 were rebuilt. Of 101,496 partially destroyed, 25,220 were repaired.

Parliament has voted to establish a fund to supplement private funds and provide interest-free loans for housing and furnishings destroyed. Such apartments are subject to rent controls. Until the fund is realized, government will advance the equivalent of between \$200 million and \$300 million a year in 1948 and 1949.

BRAZIL. The most recent estimate gives a total of 9,073,245 dwelling units in the country.

CANADA. Of the 2,706,089 dwelling units in 1941, 99% were privately-owned, the remainder state-owned. The number occupied by owners: 1,457,526; the proportion of owner-occupied homes rising.

The government is building one-family detached houses and apartment blocks.

Saskatchewan. Of 205,342 dwelling units in 1946, 144,122 were occupied by owners; 92.2%

of housing privately-owned; 0.8%, government-owned.

Up to March 31, 1947, the Federal government had built 930 wartime houses and 17 houses for veterans on small holdings. The government has confined itself to the field of emergency housing and up to Sept., 1947, had provided 640 dwelling units in former airport buildings. These units are converted into self-contained suites and rented to veterans.

FRANCE. Of the 1,600,000 houses built since World War I, 156,000 were built by private persons; 20,000 by cooperatives; remainder by public bodies. Of the 9,110,000 in post-World War I, 425,000 were totally destroyed and 350,000 partially destroyed in World War II. 900,000 have been repaired.

Rural homes, occupied by owners or farmers, estimated at 3 million. About 40% of nonrural dwelling units occupied by the owners.

ITALY. In 1931, there were 9.7 million houses with 31.7 million rooms. During the war 1,935,419 rooms were destroyed. In the years 1946 and 1947, there were 178,342 rooms partially or completely reconstructed.

The National Institute for Homes for State employees handles the construction of low-rent housing for government employees.

The Ente Autonomo Popolar handles the construction of low-income housing.

MEXICO. State employee housing, which is the main work of the government today, is priced to meet the economic situation of the workers.

NEW ZEALAND. Of 453,243 dwelling units in 1945, 229,340 occupied by owners (93.4%); 6.6%, state-owned.

Government is mainly building detached wooden units, hostels and blocks of self-contained flats of 1 and 2 bedrooms.

NORWAY. Over 90% of the homes in Norway are privately-owned.

POLAND. 50% of the units are privately-owned; the remainder by cooperatives or special groups. State grants priority to the building of lodgings for industrial workers, particularly miners and foundry workers. Next come municipal cooperative buildings, chiefly small lodgings for workers.

SWEDEN. Of 2,000,000 units in 1945, 670,000 were occupied by owners (95%); 85,000, co-operatively owned (4.5%); 10,000 owned by municipalities (0.5%).

State does not build but gives financial support for low-cost housing. From 1941-46, 90% of housing in urban areas was financed through State loans and grants.

TURKEY. State builds block apartments.

U.S.S.R. Increased building of single-family private dwellings is expected in cities as a result of a decree making land, to be leased in perpetuity, available to general public. The Constitution guarantees the right to build and own private individual dwellings to its citizens, although the land belongs to State.

In 1939, the 32.8% urban population lived primarily in state-owned dwellings; to a small extent in cooperatively-owned; and to an even smaller extent in privately-owned units. The 67.2% rural population lived in privately-owned units.

UNITED KINGDOM. Since 1919, of the 4,500,000 houses built in England and Wales, local authorities built 1,250,000.

Of the 13 million dwellings before the war, 210,000 were destroyed by war; 250,000 rendered uninhabitable and 4 million damaged. One in every 5 dwellings is occupied by the owner.

Local authorities are concentrating on building low rental houses for families in greatest need. Private building can be carried out only under special license.

UNITED STATES. Of the 41,747,000 dwelling units 31,347,000 are occupied by owners. The government is not building housing. Of 602,-878 family dwellings started as war housing 197,876 are permanent, 50,828 conversions.

Federal government, local bodies and educational institutions are completing conversion and rebuilding of 259,000 family dwellings for temporary veteran housing, of which 181,321 were federally-financed.

The Public Housing Administration administers the program of loans and subsidy aids to local housing authorities for low-rent housing projects. These are built under private construction contracts. At the end of the war, about 23,000 low-rent units remained to be built under the U. S. Housing Act. Of these, about 2,383 are now being built. The balance are still deferred because of high building costs. In 1947, of 853,400 new nonfarm homes started 845,560 were privately financed, 3,440 publicly. (See also Index, under Housing Law, 1948.)

California. In 1946, a \$16,750,000 program of state grants to localities and universities for temporary housing was begun for veterans and students. Further, a program, begun in 1921, and augmented by recent funds, has enabled 25,000 veterans to acquire houses and farms. State buys the property, resells it to the veterans who acquire title when they have completed long-term monthly payments.

Illinois. Of 1,522,217 dwelling units in 1940, 882,870 were occupied by owners. Since 1945, grants of \$30,000,000 were made for veterans housing.

Mississippi. Of 534,956 dwelling units in 1940, 130,495 were occupied by white owners; 47,623 by nonwhite. Of 356,838 houses not occupied by owners, 137,859 were occupied by white tenants; 218,979 by nonwhite tenants.

New York. State aid is furnished to provide low-rent housing for 150,000. A low-rent program of loans and subsidies to local authorities currently provides \$435,000,000 in loans and \$13,000,000 in subsidies for low-rent housing by local authorities. A \$69,800,000 emergency program will provide temporary housing for veterans and students.

North Carolina. Of 821,000 dwelling units in 1940, 42.4% were occupied by owners.

Wisconsin. Because of state constitutional restrictions, the state has built no homes. Municipal units have constructed dwellings and operated trailer camps. In 1947, grants of between \$8,000,000 and \$10,000,000 were provided to cities and counties for moderate rental housing for veterans.

METHOD OF COMPENSATION

To the question: If an industry is transferred from private to State ownership, is it confiscated or is compensation paid to the private owners? all countries answered that compensation is paid, the amount estimated in various ways according to differing circumstances and court rulings—except that the question does not apply to the U.S.S.R., where all industry is state-owned.

CONDITIONS OF EMPLOYMENT

Country	WAGES				HOURS
	Average weekly wage between 1920 & 1940		Average wage for latest year available	No. per week	
	Lowest	Highest			
AUSTRALIA (in Australian shillings and pence):					
Average wage	55/3	1914	98/1	1940 132/5	1947* 40
*A basic wage (minimum wage) set in May, 1948, was 115 shillings for men and 54% of this for women, but the rate varies with the cost-of-living index.					
AUSTRIA (in Austrian shillings):					
Manufacturing	47.79	1925	52.44	1935 305.1%*	1947 48
*Of the wage level for 1945.					
BRAZIL:					
Mining					36
Factory workers					48
CANADA (in Canadian dollars):					
Mining	34.81	1942	43.04	1947	44.7†
Manufacturing: Male	20.32	1934	35.04	1945 36.57*	47.4
Female	11.80	1934	19.89	1944	
Trade	24.07	1942	31.29	1947	
Teaching	11.00†	1934-35	23.00	1940 37.00	1947
*Average for all workers, 1947. †Coal mining; 47.8 for metal mining. ‡Estimated.					
Saskatchewan (in Canadian dollars):					
Manufacturing				1,378*	1943 40-44
*Average annual wage.					
FINLAND (in Finnish marks):					
Mining	4.63*	1920		9.50*	1946
Manufacturing	9.44*	1920		24.67*	1946
Trade	11.25*	1920		29.45*	1946
Teaching	18,000†	1924		137,000†	1946
*Average hourly wage. †Yearly salary in elementary schools.					
ITALY: 8 hours is the maximum per working day.					
MEXICO (in pesos):					
General average	18.77	1939	38.53	1943	
Mining			38.53	1943	
Industrial			28.99	1943	
NEW ZEALAND (comparative index: 1920-30 100):					
Industry	88.7	1920	113	1940 156.4	1948 and 4
*For minors.					
NORWAY* (in kroner):					
Export industry	1.35	1935	2.38	1920	2.91
Other industries	1.36	1931	2.26	1920	2.97
Trades	1.67	1931	2.47	1920	3.19
*The hourly earnings are given. †Covers miners and factory workers.					
SWEDEN (in kronor):					
Iron mining	47.84	1923*	107.18	1945	109.68 1947† 45.7
Steel industry	48.76	1923*	87.86	1945	46.8
Paper and printing	44.62	1923*	81.88	1945	112.32 1947†
Trade	49.22	1925	80.04	1945	
Average of industry					110.40 1947†
*Estimate based on 46-hour week. †Weekly salary based on average work-week industry.					

URKEY (in Turkish pounds; in 1946, 2.82 ₺ \$1.00):

	Men	For 1946*		
		Women	Minors	
Industry	3.14	2.27	1.51	8†
Commerce	3.86	2.25	.80	..
Transportation	2.56	1.73	1.11	..
Other	2.48	2.01	.94	..
Average	3.13	2.21	1.49	..

*Per day wages.

†Per day for mining and manufacturing. No restrictions for field workers.

UNITED KINGDOM (in pounds, shillings and pence):

Mining	5/7/8	.....1947	37½*
Manufacturing	5/15/0	.....1947	39-48

*Five shifts of 7½ hours.

U.S.S.R. (in rubles):

Average annual wage ..	8001929	4,1001940	6,000*1947	48†
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*Per New York Times, but Chief Engineer of Ordzhonikidze Machine Tool Plant of Moscow claimed in letter to Times (Dec. 30, 1947) that actual income in U.S.S.R., including bonuses, is 900-1,000 rubles a month. Station WOR in New York reported (Dec. 16, 1947) the following monthly salaries for 1946-47, quoting the Soviet Consulate as the source: unskilled workers, 600-700 rubles; skilled workers, 1,000 rubles; professionals, 1,500-2,000 rubles. †For white-collar and factory workers. Miners work 36-42 hours a week. The U.S.S.R. has a six-day week.

UNITED STATES (in dollars):

Mining (Bituminous coal) ..	13.91	.....1932	28.63	.....1926	66.86	.....1947	40.6
Manufacturing	16.73	.....1933	29.28	.....1939	51.89	.....1948	40.3
Retail trade					36.67	.....1947	..
Teaching	16.75	.....1920	27.71	.....1940	49.04*	.....1948	..

*Estimated.

California (in dollars):

Metaliferous mining					57.16	.....1947	43.4
Manufacturing					56.17	.....1947	39.5
Trade, wholesale					57.14	.....1947	..
Trade, retail					44.79	.....1947	..

Illinois (in dollars):

Mining					56.55	.....1948	32.7
Manufacturing					57.14	.....1948	40.9
Trade					44.14	.....1948	..

Mississippi (in dollars):

Mining	17.92	.....1939*	25.29	.....1940	57.83	.....1947	
Manufacturing	14.18	.....1939*	14.90	.....1940	33.37	.....1947	
Trade	19.41	.....1939*	19.68	.....1940	36.03	.....1947	

*Lowest available.

New York (in dollars):

Manufacturing	20.681933	28.411929	62.00*1948	40
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*For men; for women, 40.95.

North Dakota (in dollars):

Teaching					1,573.39*1947	..
Mining, underground							8†
Manufacturing							(†)

*Annual salary. †Per day. ‡No standard.

Wisconsin (in dollars):

Manufacturing	15.611932	51.521947			42.4
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RATES OF EMPLOYMENT AND PROPOSALS

AUSTRALIA. Workers employed:

1933	80%
1943	99%
1947	99%

AUSTRIA. Workers employed:

1937	77%
1947	more jobs than applicants

BRAZIL. In 1945, there were 1,543,463 totally employed. Since there is virtually no unemployment in Brazil, the government does not have a future program.

CANADA. Index of employment (1926=100):

1923	95.8
1932	87.5
1933	83.4
1943	184.1
1946	173.2
1947	187.9

Saskatchewan. Workers employed (men only):

1921	80.1%
1931	77.3%
1941	76.3%
1946	82.3%

The Federal government is the only authority with sufficient jurisdiction and resources to take the steps necessary to achieve full employment. The government has on hand a "shelf" of public works to take up some of the slack in employment when economic activity lags.

ITALY. Number and % of unemployed:

1929	301,000	1.7
1930	426,000	2.5
1931	734,000	4.2
1932	1,006,000	5.8
1933	1,019,000	5.9
1934	964,000	5.2
1935	755,000	4.1
1936	706,000	3.8
1937	874,000	4.8
1938	810,000	4.4

MEXICO. New areas for cultivation, irrigation projects, and industrialization in the cities is expected to absorb many of the unemployed.

NEW ZEALAND. Workers and % employed:

1921	511,595	42.0%
1926	551,997	41.1%
1936	644,448	43.2%
1948	709,700	41.6%

The 1945 Employment Act set up a National Employment Service to provide for placing workers in employment and assisting employers to find labor, to make surveys, forecasts, etc.

To forestall deflationary pressures, New Zealand is able to draw on its "Stabilization Accounts" (built up from the differences between amounts received overseas for exports and amounts paid out to exporters or producers, such difference in amounts being vested in the state "on trust" for farmers).

NORWAY. Percentage of unemployment per 100 members of unions from 1920 to 1941:

1920	2.3
1925	13.2
1929	15.4
1930	16.6
1931	22.3
1932	30.8
1933	33.4
1939	18.3
1941	11.4

Since 1941, there has been practically no unemployment.

POLAND. About 100,000 unemployed because of change of frontiers and transfer of unskilled farm workers to industry, where they do not find work immediately.

State and trade unions organize schools to provide necessary trained workers.

SWEDEN. Employment in trade unions:

1923	87.5%
1932	77.6%
1933	76.8%
1943	94.3%
1946	96.8%
1947	97.2%

At present, a shortage of labor, estimated for Feb., 1948, of 60,000 workers.

U.S.S.R. There is no unemployment.

UNITED KINGDOM. Insured workers employed:

1923	88.4%
1932	77.2%
1933	80.5%
1943	99.4%
1946	95.4%
1947	97.9%

UNITED STATES. Employed and unemployed:

1929	46,700,000	2,000,000
1932	37,900,000	12,700,000
1943	52,600,000	1,100,000
1947	53,000,000	2,100,000

California. Percentage of civilian workers employed:

April, 1940	86%
1943 average	98%
1947 average	92%

Mississippi. Monthly average of total workers covered by unemployment insurance:

1939	111,851
1943	163,892
1947	180,000

New York. Percent of civilian employed:

April, 1940	82%
April, 1945	over 98%
March, 1948	94%

Wisconsin. Non-agricultural workers (excluding self-employed, proprietors and domestics):

1943	885,300
1947	969,000
Feb. 15, 1948	971,500

COLLECTIVE BARGAINING

Country	Total workers in all trade unions	Do workers have a right to:			
		Bargain collectively in unions of their own choosing	Strike	Conduct a boycott	Participate in management
Australia	1,263,658	Yes	Yes ¹	Yes	Yes
Austria ²	1,238,088	Yes	Yes		Yes
Brazil		Yes ¹⁷	Yes ¹⁷	No	No
Canada ³	831,697	Yes	Yes	Yes	Yes
Saskatchewan ⁴	26,000	Yes	Yes	Yes	Yes
China	2,046,710	Yes	Yes		
Finland ⁴	299,565	Yes	Yes	Yes	Yes
France		Yes	Yes		
Italy		Yes	Yes	(¹⁸)	Yes ¹⁹
New Zealand	269,379	Yes	Yes ⁵	No	(⁶)
Norway	447,000	Yes		Yes	
Poland ⁷	3,177,248	Yes	Yes	Yes	Yes
Sweden	1,390,000	Yes ⁸	Yes	Yes	Yes ⁸
Turkey			(⁹)	(⁹)	
U.S.S.R. ¹⁰	27,000,000	Yes	(¹⁰)	(¹⁰)	Yes
United Kingdom ¹¹	8,714,000	Yes	Yes	Yes	Yes
United States ¹²	16,077,000	Yes	Yes	Yes	(¹²)
California		Yes	Yes	Yes	(¹²)
Illinois	600,000	(¹⁴)	(¹⁴)	(¹⁴)	(¹⁴)
Mississippi	27,000	Yes	Yes	Yes	Yes
New Mexico		Yes	Yes	Yes	Yes
New York		Yes	Yes	Yes	Yes
North Carolina		Yes	Yes	Yes	Yes
North Dakota	14,000	Yes		No	No
Texas		Yes	Yes	Yes	Yes
Wisconsin	478,000	Yes	Yes ¹⁵	Yes ¹⁵	(¹⁶)

¹If not subject to compulsory arbitration. The Commonwealth court of Conciliation and Arbitration was established in 1904 and similar courts have been established in 4 of the 6 states. Registered unions or employers' associations may present a log of grievances. Strikes and boycotts as techniques are subordinated to the legal procedures of the court. Decisions are binding for not more than 5 years. In 1946, there were 869 industrial disputes affecting 348,548 workers, directly or indirectly.

²Under the law of March 28, 1947, workers may establish factory councils to advise management on methods of production, distribution schedules, investment plans, etc.

³The right of workers to bargain collectively in unions of their own choosing is provided by legislation by the Dominion and the 9 Provinces. In the Province of Prince Edward Island, trade unions, except in railroad industry, must be autonomous and not under the control of any outside body. Dominion government employees are not forbidden to join a trade union but only those employed by Crown companies are allowed to enter into written collective agreements. Civil servants do not fall within the meaning of this term. The Provinces follow the same pattern, except that Saskatchewan enters into agreements with employees' organizations. Dominion and Provincial legislation provides for the right to strike against private industry after collective bargaining and certain specified conciliation procedures have been complied with and failed. Dominion and Provincial employees, except for certain Crown groups, are not forbidden by statute to strike. Quebec has legislation against strikes by civil servants. No law in Dominion or Provincial legislation forbids a boycott, though strike action of a sympathetic nature is subject to conciliation controls and waiting periods. Criminal Code provides for criminal conspiracy. This applies to boycotts against private or government-owned industries. No law for workers' participation in management, either by Dominion or the Provinces, in either private or government-owned industries. Workers in private industry participate in management through the establishment of Labour-Management Production committees by the Dominion authorities. This does not cover a great proportion of industry.

⁴Organized workers form an advisory board to give suggestions and conduct negotiations in labor-management relations.

⁵Subject to majority of unions' consent by secret ballot.

⁶Not covered by statute; the Federation of Labour gives

encouragement to unions to establish worker-management committees in industry—those which participate in discussion on all aspects of management, those with some exclusive and particular function (e.g. social activities and welfare), and those purely advisory. Most committees are in the latter two categories.

⁷By decree of Feb. 5, 1945, workers' councils control manufacturing and financial activities of their employing plant; supervise technical arrangements and engage in social and cultural activities.

⁸By agreement between Employers Confederation on one hand and Central Organization of Salaried Employees on the other, labor participates in management. Enterprise councils are formed with representatives of the employers and employees meeting for the purpose of deliberating on matters of production and welfare. So far, 922 enterprise councils have been set up affecting about 230,000 union members. Government conducts a mediation service to help create new contracts. Its decisions are not binding. The Labor Court settles disputes concerning existing contracts. This form of arbitration is compulsory and results are binding.

⁹Yes, but not collectively.

¹⁰No private industry in the U.S.S.R. Unions are organized on an industrial basis. Membership is voluntary. The trade unions bargain collectively with management for all members in a given enterprise. Stoppages (in the form of strike or boycott) are not illegal but an elaborate system of arbitration has been set up for settling labor-management disputes and avoiding work stoppages. Trade unions participate in management on both national and local scale through representatives from commissions on wages, safety devices, cultural and educational work, living conditions, work rationalization and consumers' goods. Unions are responsible for seeing that labor laws are obeyed, and also for State social insurance.

¹¹Joint consultation committees are established over most of private industry; throughout all publicly-controlled industry. ¹²See pages 354-5 for Taft-Hartley Act.

¹³Limited. ¹⁴Dependent on Taft-Hartley Act.

¹⁵Compulsory arbitration for all public utility disputes.

¹⁶Not covered by statute. ¹⁷Private industry only.

¹⁸No laws forbid a boycott, but they are not used.

¹⁹In several large industries there exist councils of working management of a consultative character.

PRIVATE, GOVERNMENT & COOPERATIVE OWNERSHIP

AUSTRALIA. Natural Resources: Mines are privately owned.

Transportation: Government owns all railroads, and the Trans-Australian Airlines (TAA), and subsidizes privately-owned airlines. Shipping is private but government is contemplating control of overseas shipping. Local transportation lines mostly municipally-owned.

Communication: Government operates telephone and telegraph systems and the national radio stations. Most radio stations are owned and operated privately. Radio owners pay an annual license fee.

Power and Light: Essentially privately-owned, subject to government regulation.

Agriculture, Retail Trade: Private.

Banking: A nationalization bill was passed; court decision is awaited.

Insurance: Essentially private.

CANADA. Natural Resources: Under administrations of provincial governments. Forests, mineral, and oil rights owned by the Crown.

Transportation: About 59% of railways are government-owned. Over 38% of investments in road and equipment of electric railways are government-owned. Passenger and freight motor carriers are private. The Trans-Canada Airlines, only government-controlled airline, owned almost 58% of the total fixed assets in civil aviation in 1946.

Communication: The Canadian Broadcasting Corp. administers the only national network and controls such private broadcasting companies as have licenses. Government owns over 50% of the telegraph lines. Over 80% of total telephone investment is private. Cooperative systems own almost 5%, the remainder held by the Dominion government (less than 1%), the Provincial government (13.5%) and Municipal systems (1.2%).

Power and Light: Most provinces have power commissions controlling acquired electrical systems in their area; although in certain Provinces such as Quebec and British Columbia, private companies predominate.

Agriculture: Agriculture is wholly private except for the Province of Saskatchewan.

Retail Trade: Sales of individual proprietorships accounted for 46.2% of the retail trade in 1941. Liquor stores, which are operated by the various provincial governments, transacted 3.2% of total business. Retail sales of cooperative associations were 0.6%.

Banking: The Canadian Banking System is private, consisting of 10 chartered banks. The Bank of Canada, a coordinating central bank, is wholly government-owned. There are three types of savings bank in addition to the savings departments of the chartered banks: The Post Office Savings Bank, in which deposits are a direct obligation of the Federal government; provincial government savings banks in Ontario and Alberta; and in the Province of Quebec, two which were established under Dominion legislation.

Saskatchewan. Total capital invested in government industries: \$37,000,000 (Aug. 1948). Capital assets of cooperative enterprises: \$66,845,000 (fiscal year, 1946-47).

Natural Resources: Government operates a Fur Marketing Service, a Timber Board and a Fish Board for marketing products of operators. It owns three fish filleting plants and a box factory. The most outstanding government venture is its sodium sulphate plant at Chaplin. Government also owns a brick plant and Clay Products Division for making pottery, soil pipe, etc.

Transportation: Government owns and operates all bus lines except a few local services and inter-provincial service. It owns an airline serving the northern settlements.

Communication: Government owns all telephone lines except a few rural lines.

Power and Light: Government owns all power installations except municipally-owned systems and one private company serving the city of Moose Jaw and environs.

Agriculture: Government operates experimental farms and markets wheat through the Wheat Board. It operates a woolen mill, shoe factory and tannery to process raw materials. The cooperatives have grain, livestock, dairy products, poultry and honey marketing associations. They operate a horse processing plant, vegetable oil plant and flour mill. In Sept., 1948, there were 1 cooperative farms.

Retail Trade: Cooperatives operate a large number of retail grocery, hardware and drug stores; a central wholesale; filling stations, bulk fuel stations and a drug store.

Banking: Private with the exception of the Bank of Canada and some credit unions operated by cooperatives.

Insurance: Government operates an insurance office which deals with all insurance except life. There is a cooperative life insurance company.

Other Businesses: Government operates a printing plant, seed cleaning plant and several garages and machine shops for servicing its own vehicles and repairing cars covered by the province-wide Automobile Accident Insurance scheme. Cooperatives have begun to distribute farm machinery.

CHINA. Natural Resources: Article 1 of the Chinese Mining Law reads: "Mineral resources within the boundary of the Republic of China belong to the state. No prospecting or exploitation of any mineral is allowed except when mining rights are granted by the government according to law."

Transportation and Communication: Over 90% of the railroads are owned and operated by government. All major aviation corporations such as China National Aviation Corp. (CNAC) and Central Air Transport Corp. (CATC), are government-owned and operated. The Civil Air Transport is the only private concern. More than 50% of shipping is owned and operated by government.

Postal Service and tele-communications are government-owned and operated.

Power and Light: Total electric power supply is about 900,000 kw.; about 570,000 kw. is supplied by plants under a government agency.

Agriculture: Almost all farms are owned and operated privately.

Retail Trade: Private.

Insurance: During the war, government engaged in various lines of insurance such as War Risk Transportation and Land War Risk Insurance. Aside from these, the Central Trust operates a property insurance department. The Postal Remittances and Savings Bank operates the simple Life Insurance plan. Each of the four government banks owns and operates an insurance company. In June, 1946, only one company, the China Life Insurance Co., Ltd., was engaged in life insurance.

FINLAND. Natural Resources: Private.

Transportation: Railways owned by State.

Communication: Wireless, including long distance telephone operations, and telegraph communications are a State monopoly.

Power and Light: To a great extent, controlled by government.

Agriculture: Land ownership 1941: private owners, 49.2%; state, 41.6%; cooperatives, 8.1%; communities, 2.1%.

Retail Trade: Private and cooperative.

Banking: Private, except for the central bank (Bank of Finland), which is government owned.

Insurance: Private.

ITALY. Natural Resources: The most productive agency is the *Azienda Carboni Italiani* (for Italian Coal), which supplies through the mines of Carbonia, in Sardinia, almost all Italian coal ore production. By the treaty of Feb. 11, 1947, the coal strata of Arsa (Istria) passed to Yugoslavia. The *Societa' Nazionale Cogne* is State domain, and operates important iron mines in Cogne (Val d'Aosta). The iron deposits of Elbani are State property, leased to private company.

Transportation: The State railways constitute the most important industrial company in the nation. In the principal cities there is now a widespread system of municipalization of the public means of transportation, which are under concessions. The same system is also widespread for production and distribution of electrical energy and gas.

Banking: Banca d'Italia bonds are the property of public agencies. The three principal banks, called banks of national interest, are the property of the I.R.I., a State Agency. Five other principal banks are organisms of public law, i.e., moral entities.

Insurance: Private ownership prevails, alongside the I.N.A. (Istituto Nazionale delle Assicurazioni [National Institute for Insurance]) which, since 1912, enjoys special privileges.

The I.R.I. (Istituto Nazionale per la Ricostruzione Industriale [National Insti-

tute for Industrial Recovery and Reconstruction]) handles State property in the industrial field as well as in the field of marine transportation.

Consumer cooperatives are widespread in Northern Italy. The model cooperative is that of Turin. Productive cooperatives are less widespread.

NEW ZEALAND. Natural Resources: A bill is now before Parliament providing for purchase by the state of all coal measures, and voluntary negotiations are proceeding for requisition from private owners. In 1947, the state mines produced 42% of total; cooperatives, 3%; private, 55%. Gold and other metals and minerals are privately mined. Exploitable or potentially exploitable forest: state forest, 77%; communal forest, 3%; private forest, 20%. Government handles 1.5% of all fishing operations.

Transportation: Government owns all air freight and passenger services; 96.7% of railways transport. Roads and road transport: (a) capital assets: state owns 44%; balance, private; (b) passenger miles (commercial): state runs 27%, balance is private; (c) freight ton miles: state runs 6%, balance is private. Tramways: 100% publicly-owned (mainly municipal). Shipping: state owns 4% of ships engaged in trading; cooperatives own one small trading vessel and a few fishing vessels; balance is private.

Communication: All postal, telegraphic and telephonic communications and broadcasting are state-owned (with provision for amateur transmission on specified waves).

Power and Light (Electric): State owns 87.1% of power produced by hydro-electric, gas, oil and steam plants. Of balance, municipal authorities own 11.5%; private, 1.4%. (Gas): Municipal, 30%; private, 70%. Ratio of electricity to gas generated is 2.1 to 6.8.

NORWAY. Natural Resources: In private and municipal hands.

Transportation: Railways are state-owned.

Communication: Post, telegraph and telephone systems are government-owned.

Power and Light: Municipal-owned.

Agriculture, Retail Trade: Private.

Banking: Commercial and savings, private.

Insurance: Private.

A few factories are operated privately but the state owns majority of shares.

POLAND. Natural Resources: Of the forests (19,200,000 acres), 16,800,000 acres are state-owned, about 1,600,000 acres are in private hands, 720,000 acres are owned by cities.

Transportation: Railways are state-owned and operated except for prewar shares of foreign capital. River traffic is state-owned. Of automotive traffic, 52% is state-owned, 40% is private, 8% is cooperative. Airlines, state-owned.

Communication: Telephone and postal systems are state-owned.

Power and Light: Principally state-owned. Some towns own municipal electric works.

Larger industrial plants have their own electric works.

Agriculture: Mostly private.

Retail Trade: Mostly private. A few state and cooperative department stores in the big towns.

Banking: Mostly state-owned, including National Bank of Poland. Cooperatives are financed by the Bank of Cooperative Economy. Those industrial plants not nationalized are privately financed.

Insurance: State enterprise.

SWEDEN. Natural Resources: 31.7% public, 68.3% private. Most of area owned by companies and corporations consists of forests in the north of Sweden. Much state-owned area consists of mountain ranges and other unproductive land. Forests: about 80% privately-owned. Iron Ore resources: iron mine fields in which the state is part owner comprise about 85% of all known iron ore resources.

Transportation: 80% of the railways are state-owned.

Power and Light: 40% of the water power stations, about half of the total water power resources, is state-owned.

Agriculture: Cultivated area: 4% is state-owned; 96% is private. 90% of all farmers are members of one or more of the farmers cooperatives. 95% of all milk, 80% of the livestock for slaughter, and 65% of grains and eggs are marketed by cooperatives.

Banking: 5% is state-owned; 3% is cooperative; balance is private.

Industrial Production: 1% is state-owned, 4% is cooperative, balance is private.

Insurance: Including the sole state-owned commercial insurance which is connected with social security plans: state-owned, 25%; cooperatively-owned, 0.5%; and privately-owned, 75%.

TURKEY. Natural Resources: Forests are state-owned. Mines are partly government-owned and partly private.

Transportation: Railways are state-owned. Shipping is state-owned and private. Transportation by road is private.

Communication: Entirely state-owned.

Power and Light: Mainly owned by municipalities; some are private.

Agriculture: State ownership is limited.

Retail Trade: Entirely private.

Banking: State and private.

Insurance: Private, but state sometimes participates.

Industry: Sugar, paper, iron and steel are state-owned. Others are private.

U.S.S.R. Natural Resources, Transportation, Communication, Power and Light and Banking: State-owned.

Agriculture: 99.3% of all sown areas were collectivized in 1938.

Retail Trade: State, 61.3%; consumers cooperatives, 19.6%; marketing cooperatives run by collective farms, 19.1%.

Insurance: Group insurance plans for life, fire and theft; also trade union social insurance.

UNITED KINGDOM	Government ownership	Private	Cooperatives*
Natural Resources:	Coal*	Remainder	.....
Transportation:	All except short distance road haulage and ocean shipping	.....	.....
Communication:	All	.....	.....
Power and Light:	All	.....	.....
Agriculture:	.....	Most	Some
Retail Trade:	Negligible	90%	10%†
Banking:	Central Bank	Remainder	C.W.S. Bank
Insurance:	Social insurance	Most	Insurance C

*Also Oil, but production is almost negligible. †In terms of manpower.

UNITED STATES. Being committed to the free enterprise system, the U. S. owns and operates a very small proportion of business.

Natural Resources: Mostly private. The U. S. has a large Federal forest reserve, many water power installations (TVA, etc.), helium and oil lands and a few mineral areas.

Transportation: Railroads almost exclusively private. Some municipal ownership of urban electric lines, subways and busses. Shipping and aviation are private, though both have been subsidized by the government at times. Federal commissions have regulatory powers.

Communication: Post Office is government-owned; telephone, telegraph, cable, radio and television are private but regulated by Federal commissions.

Power and Light: About 18.9% of all electric energy, and about 5% of various kinds of gas are products of Federal plants. Remainder is private.

Agriculture: Private.

Retail Trade: Private except for some cooperatives in the food industries.

Banking: Private, but chartered and regulated by the Federal government or the States. Mutual Savings banks resemble cooperatives in that depositors own the

Even the Federal Reserve System is privately owned by the member banks although administered by a Board of Governors appointed by the President of the U. S. Insurance: Only Social Security and Veterans Insurance are Federal. All others are private, under Federal or State regulation.

California. Transportation: Mostly private. Communication: Private.

Power and Light: Essentially private.

Illinois. Public Utilities: Gas, electric, water, telephone, railroad and motor carrier, air transportation, public warehouses, etc., are subject to rate regulation by the Illinois Commerce Commission.

Mississippi. Natural Resources: Essentially private.

Transportation, Communication: Private.

Power and Light: Almost entirely private. Agriculture, Retail Trade, Banking, Insurance: Private.

New Mexico. Power and Light: 75% private; 25% is state-owned.

North Carolina. Natural Resources: Minerals: private. Water power: private. Forests: 1,500,000 acres are Federal-owned; 19,000 acres, state park area.

Transportation, Communication, Agriculture, Retail Trade, Insurance: Private.

Wisconsin. Transportation: Private. Communication: Of 630 telephone companies, 617 were privately-owned in 1947 and 13 were cooperatives.

Power and Light: 46 private companies supply 797,000 consumers; 91 municipal companies supply 98,000 consumers.

CIVIL LIBERTIES

AUSTRALIA. No restrictions on political or racial groups except for aborigines (about 50,000) living on reservations or as nomads.

AUSTRIA. No restrictions.

CANADA. No restrictions.

Saskatchewan. The only Canadian Province with a Bill of Rights. Enacted in 1947, it affirms the right of all citizens to freedom of conscience, belief and religious association; to freedom of speech, etc. The Act also forbids discrimination on grounds of race, creed, religion, color or ethnic or national origin, etc.

FINLAND. No restrictions.

ITALY. No restrictions of any group except that special laws forbid the reorganization of the Fascist party.

MEXICO. No restrictions.

NEW ZEALAND. No restrictions.

POLAND. The Polish Declaration of Rights and Liberties guarantees:

1. Equality before the law, regardless of nationality, race, creed, sex, origin, social status and education;
2. Security of person, life and property;
3. Freedom of conscience and of worship;
4. Freedom of scientific research and the publication of the results thereof and freedom of creative artistic endeavor;
5. Freedom of press, speech, association, assembly, public meetings, demonstration;
6. Right to vote and to seek public office;
7. Inviolability of the home;
8. Secrecy of the mails and other means of communication;
9. The right of instituting court actions and of filing petitions with the proper State and Municipal authorities;
10. The right to work and to periods of rest;

11. The right to relief in case of unemployment and incapacitation;

12. The right to education;

13. Protection of family life and care of mother and child;

14. Protection of health, working capacity.

The abuse of the civil rights and liberties for the purpose of overthrowing the democratic form of government of the Republic is prevented by law.

SWEDEN. No discrimination because of race or religion. Complete civil liberties are safeguarded.

The Constitution contains, among others, the following explicit guarantees:

1. Complete freedom of speech and press;
2. No person may be deprived of life, liberty or public office except through law and after judicial procedure;
3. No person may be deprived of the right to privacy in the home;
4. Freedom of religion.

The Constitution and law contain certain provisions that might be construed as a limitation of religious freedom. Since the 16th century, the Evangelical Lutheran Church has been the National Church of Sweden. The King and members of his cabinet must belong to this church, likewise foreigners who are appointed by the King as professors or teachers at the State universities.

TURKEY. No restrictions on the freedom of any group. Every Turk is born and lives free. Liberty consists of any action which is not detrimental to others. Individual liberty is limited only at the point where it infringes on the liberty of others. All Turks are equal before the law. The life, property, honor and residence of each individual are inviolable. No one may be censured for his creed, religion or doctrine. The press is free.

U.S.S.R. Civil liberties in the Constitution cover the "right to work"; the "right to rest and leisure"; equal rights for women "with men in all spheres of economic, state, cultural, social and political life"; freedom of speech, press, assembly, procession; the "right to unite in public organizations"; the "inviolability of the person and the homes of citizens"; also the "right of asylum to foreign citizens persecuted for defending the interests of the working people." Additional rights:

Article 123: "Equality of rights of citizens irrespective of their nationality or race, in all spheres of economic, state, cultural, social and political life, is an indefeasible law.

"Any direct or indirect restriction of the rights of, or, conversely, any establishment of direct or indirect privileges for, citizens on account of their race or nationality, as well as any advocacy of racial or national exclusiveness or hatred and contempt, is punishable by law."

Article 124: "In order to ensure to citizens freedom of conscience, the church is separated from the state, and the school from the church. Freedom of religious worship and freedom of antireligious propaganda is recognized for all citizens."

Article 130: "It is the duty of every citizen to abide by the Constitution, to observe the laws, to maintain labor discipline, honestly to perform public duties, and to respect the rules of socialist intercourse."

Article 131: "It is the duty of every citizen to safeguard and strengthen public, socialist property as the sacred and inviolable foundation of the Soviet system, as the source of the wealth and might of the country, as the source of the prosperous and cultured life of all the working people.

"Persons committing offenses against public, socialist property are enemies of the people."

Article 132: "Universal military service is law."

Article 133: Treason to the country—violation of the oath of allegiance, desertion to the enemy, impairing the military power of the state, espionage—is punishable with all the severity of the law as the most heinous of crimes."

UNITED KINGDOM. Freedom of Speech: Limited only by laws against treason, sedition, blasphemy, obscenity, defamation and breaches of the peace, and the *Official Secrets Act*. Offenses are tried by judge and jury. Plays must be licensed for public performance.

Freedom of Ballot: Every British subject over 21, resident of U. K., has right to vote except members of House of Lords, convicted felons and lunatics. Election of members to House of Commons must be held at least once every 5 years, in which everyone entitled to vote may be a candidate except a clergyman of the Established Church.

Freedom of the Press: Limited only by laws against sedition, et al. No licensing or cen-

sorship but news reports of certain court cases are restricted where publication would tend to injure public morals. The identity of any young person who is accused or appears as a witness in a juvenile court may not be disclosed in the Press. The Press may not pass judgment upon cases which are pending in courts. Biased or inaccurate reporting of Parliamentary proceedings would be a breach of the privileges of Parliament.

Freedom of Religion: Expressions of religious belief are subject only to those restrictions which apply to freedom of speech and assembly. The King must be a member of the Established Church and the Lord Chancellor must be a Protestant. Marriages celebrated in a Roman Catholic church are not valid unless also celebrated in proper civil form.

Freedom of Assembly: Any number may assemble in any place provided they do not obstruct traffic or passersby nor break the peace. Public processions which might cause serious disorder may be prohibited. Uniforms may not be worn by political parties. Serious offenses are triable by judge and jury. Public assembly within one mile of Parliament is prohibited while Parliament is in session if their purpose is to bring pressure upon its deliberations.

Personal Liberty: No person may be arrested or imprisoned or subjected to any form of physical restraint, unless charged with an offense or duly convicted. Children below the age of discretion may be chastised or restrained by their parents or guardians provided the treatment is moderate and reasonable. The High Court may imprison without trial any person guilty of contempt of court; either House of Parliament may commit to prison any person guilty of a breach of the privileges of Parliament. The right to personal liberty may be enforced by: (1) prosecution for assault, or unlawful imprisonment; (2) application of a *Writ of Habeas Corpus*.

Life: In the 18th century, there were over 250 capital offenses under the law of England; there are now four—murder, treason, piracy and setting fire to naval dockyard.

Jobs: Those leaving jobs below foreman level are required, when seeking new ones to obtain them through the Ministry of Labour Employment Exchange. No one can be deprived of the right to work on account of race, religion, or political views. Recent decisions concerning Communists and Fascists in government employment usually involved not dismissals, but the transfer of the individuals concerned to other government work on grounds of security and no political affiliation. There is freedom to associate together to form trade unions and to strike.

In general: Everyone, including the King is subject to the rule of law.

All offenses come in the first instance before the same courts, and no consideration of rank, wealth, or political affiliations can determine the kind of court before which the accused person is tried. Certain offenses

by clergymen are tried in special ecclesiastical courts. In all cases of serious crime, trial is by judge and jury, and in many less serious cases the accused may, if he wishes, choose to be tried by a judge and jury rather than by magistrates. The police have no power to compel any person, whether under arrest or not, to give any facts within his knowledge or to answer questions put to him. The courts cannot compel the accused person or a witness to give evidence which may incriminate himself, nor can either husband or wife be compelled to give evidence against the other. The burden of proof that the accused is guilty of the offense with

which he is charged lies always upon the prosecution. If the prosecution fails to make even a *prima facie* case against the accused, the judge must dismiss the charge.

UNITED STATES. Civil liberties are protected by the Constitution, as in Article 1, Sections 9 and 10, and in the Amendments, particularly the first ten, known as the "Bill of Rights."

Civil liberties are protected against infringement by the states through various state constitutions as well as through the Federal Constitution. However, in 8 states a poll tax, in effect, limits the right to vote.

AGRICULTURE

Country	Percentage of farm acreage owned by:			Percentage of farm acreage cultivated (or tilled) by:			
	Individual farmers	Cooperatives	Govt.	Resident owners	Tenants	Cooperatives	Govt.
Australia	99.0+				(¹)	(¹)	(¹)
Austria	80.0	(¹)					
Canada				70.3 ²	29.7	0.0	0.0
Saskatchewan	83.5	0.007	16.5	64.0	35.9	0.1	(¹)
China	40.0 ³						
Finland ⁴	74.0 ²⁰	2.1 ⁵	2.1	95.6		4.4	0.0
New Zealand	61.0		39.0	50.0	48.0		2.0
Norway	99.0+	(¹)	(¹)	92.0	8.0	(¹)	(¹)
Poland	88.0	(⁶)	11.0	88.0		1.0	11.0
Sweden	87.3 ⁷	0.0	6.2	73.5	26.5	(¹)	(²²)
Turkey ⁸							
U.S.S.R. ⁹	0.6	90.3 ¹⁰	9.1	1.5	0.0	89.1 ¹¹	9.4
United Kingdom ²¹ ..	96.0	3.0	1.0	33.0	63.0	3.0	1.0
United States ¹²	85.0	0.0	6.0	60.6	39.4	0.0	0.0
California ¹³	63.0		(¹⁴)				
Illinois	42.0	0.0			58.0	0.0	
Mississippi	99.9	0.0		65.0	29.1	0.0	(¹⁵)
New Mexico	42.0	0.0	58.0 ¹⁶				
New York ¹⁷							(¹⁵)
North Carolina	100.0						
North Dakota	100.0			78.0	22.0		
Texas ¹⁸							
Wisconsin ¹⁹	79.6			73.6	26.4		

¹Insignificant.
²Includes land cultivated by "managers." If the operator of a cooperative or government farm receives regular wage payments, he is reported as a "manager" of the farm and grouped with other owner operators.

³1946. ⁴1941. ⁵Of which 2.4% are owned by communities and Church bodies.

⁶Less than 1%; these are large estates taken over by the government to be parceled out among the member farmers.

⁷6.5% are owned by a commercial company and several foundations.

⁸Farm acreage cultivated by resident owners, tenants and the government averages about 13 million hectares per year. Government cultivated acreage is negligible.

⁹1938. ¹⁰Of which 3.9% are private plots of collective farmers and 0.8% are private plots for urban workers and employees.

¹¹Of which 21.5% are cultivated by private plots of collective farmers and 4.8% by private plots for urban workers and employees.

¹²Corporations own 5% and 4% are owned by unsettled estates and partnerships.

¹³1945. ¹⁴A large area of land is retained by the state, some of which is leased to farm operators.

¹⁵There is no state-owned land except what is operated by penitentiary experiment stations.

¹⁶Of which 42% is owned by the Federal government.

¹⁷There were 8,365,944 acres of cropland in 1945 of which 5,461,943 acres were operated by owners; 1,847,725 by part owners; 267,872 by managers, and 788,404 by tenants.

¹⁸There are 385,000 farms of which 200,000 are fully owned. The farm population is about 1,625,000 of which 145,000 are tenants and 25,000 are share croppers.

¹⁹1945. ²⁰1948. ²¹Estimated.

²²Mainly colleges and experimental or prison farms.

AGRICULTURE

AUSTRALIA. No limitation to size of farms nor plan to break up farms.

CANADA. No plan to break up farm holdings.

Saskatchewan. As of Sept., 1948, there were 11 groups of cooperatives in the Province, six of which were organized by veterans. Membership varies from 5 to 17 and acreage operated, from 200 to 9,000 acres. Most farms are organized on a membership fee basis, with each member paying \$100 membership fee. Other capital provided by members is in the form of long-term loans. Income to members is from three sources: monthly wages; interest on capital invested by each member which cannot exceed 5%; and surplus after expenses have been paid and reserves set aside, which is distributed in proportion to the amount of time each member worked for the farm during the year.

There is no limitation to size of farms, except in case of leasing of government lands where concentration of ownership is discouraged. No plan to break up holdings.

CHINA. State plans to put farmland under ownership of bona fide farmers.

FINLAND. No limitation to size of farms. In extensive colonization program, the land is being distributed among private owners.

ITALY. The agrarian cooperatives are rarely owners of the lands which they work and from which they benefit.

Concessions of untitled lands to peasant cooperatives were provided for in the legislative decrees of Oct. 19 and Sept. 6, 1946. The program has effected up to as many as 4,788 concessions for a total area of 190,229 hectares. State possessions are estimated at about 7%.

Limitation on property holding is provided for, with social aims in view, by the new constitution, which imposes obligations and obstacles on private tillable land; sets limits on extension of such holdings according to agrarian zones and regions; promotes and requires land reclamation, transformation of wide tracts of land belonging to a single landowner; and helps small and average sized properties.

NEW ZEALAND. No limitation to size of farms but a

tribunal may refuse consent to sale that would conduce to undue aggregation of land by any person or organization. State does not break up farms but land taxes and death duties tend to enforce holders of large, uneconomic plots to break them up. Broken up land is distributed among private owners. Cooperatives may purchase on equal terms with private persons.

NORWAY. No limitation to size of farms nor plan to break up holdings.

POLAND. State limitation to size of farms is 120 acres in Eastern and Central Poland; 240 acres in Western Poland. State owns 11% (5,640,000 acres) of tillable land; individual farmers own 88% (44,400,000 acres); cooperatives own 840,000 acres.

SWEDEN. No limitation to size of farms nor plan to break up holdings. An act adopted by Parliament (1947) will combine small, unprofitable farms into bigger and more profitable units. Only those who earn their living by farming may purchase farms without state permission. State guarantees minimum prices to farmers.

TURKEY. Each farmer is entitled to an average of 5,000 donums (1 donum equals .6 acres). State plans to break up property holdings and distribute the land to private owners.

U.S.S.R. 85% of total peasant farm holdings are collectivized. A serious attempt to collectivize in the Baltic republics of Estonia, Latvia and Lithuania, which have been part of the U.S.S.R. since 1940, is being made. Limitation on private holdings of collective farmer; in Estonia is 6.10 hectares (about 1.5 acres); in Latvia, individual (private) farmers, 30 hectares; in Lithuania, a small undetermined acreage.

UNITED KINGDOM. Main types of cooperative farms are dairy. No limitation to size of farm holdings nor intent to break up property.

UNITED STATES. No limitation whatever to size of farm holdings nor intention to break up holdings. No limitations within the states except New York and Wisconsin which own some cooperative land. Many states run experimental farmlands usually tilled by prisoners.



End of Questionnaire Answers



QUESTIONNAIRE COMMENTARY

by HARRY W. LAIDLER

IN THE foregoing pages, a wealth of vital and significant information is presented regarding the social and economic conditions and structures of a number of the world's key countries. We regret that *The Questionnaire* has failed to elicit responses from a larger number of nations and that some countries were unable to provide more adequate information. This was no fault of our editorial staff. Rather it was, in general, due to the lack of proper statistical agencies in many countries or to the inability of these agencies to furnish the requested information before this volume went to press. Official statistics in few countries have been brought up to date; those of the U.S.S.R., for example, are of 1940. The U.S.S.R. estimated budget for 1948 is 429,149,697,000 rubles; but we have no recent figure on national income.

All countries have, we assume, cooperated with the *Almanac* to the best of their ability. The answers from Great Britain, Sweden, New Zealand, the Province of Saskatchewan in Canada and one or two other countries are particularly complete and thorough. The facts submitted by some others are, unfortunately, partial and incomplete. France, for instance, has supplied rather meager information despite the fact that a member of the staff visited various officials of the French government in Paris and members of the government service were deputized to prepare the material for the *Almanac*. Even such figures as those on the national income were not supplied in the government answers. In this instance, allowance should, we believe, be made for the confused political and economic conditions recently prevailing in that country.

Many of the answers sent by the Chinese agency might also be criticized as having been drawn from such secondary sources as American newspapers.

The case of Russia is unique. Here the government itself felt unable to furnish the statistics desired and designated the American-Russian Institute as a source. As this is an unofficial organization functioning in the United States and securing its information from various sources, we felt that the reader would be interested in having the answers evaluated by an expert on Russian affairs, one not connected with this Institute. We therefore asked Professor Harry Schwartz, Associate Professor of Economics of Syracuse University, a close student of the U.S.S.R., to comment on the material furnished.

Professor Schwartz declares that the cost of living figures presented have failed to tell the whole story. . . . While prices of rationed foods in the Soviet Union remained at about the 1940 level until Sept., 1946, in that month rationed food prices trebled. Most other foods are not available, except at unrationed commercial stores or in the open market where prices are many times greater than in 1940. Professor Schwartz is of the opinion that Russia has suffered from inflation following the war at least as much as has any other major participant. . . . As for housing, the basic fact to keep in mind, is that housing is extremely scarce in Russia—much more so than in the United States. The typical Soviet family lives in one or two rooms and shares kitchen and bath facilities with people who reside in other rooms of the same apartment. A tremendous amount of housing space, as is well known, was destroyed during the war. . . . As for wages, 6,000 rubles constituted the average Russian wage in 1947. Printed figures, generally, include bonuses for above-production quota. . . . In the field of labor-management relations, Dr. Schwartz declares that the Soviet workers do not in practice have the right to strike or boycott.

Experts on the economic life of other countries may well have numerous comments to make on the data furnished—such as in the Turkish answer to the questionnaire, that the workers in Turkey have the right to strike, "but not collectively."

Obviously all material here presented on national income, wages, social legislation, civil liberties, etc., has to be interpreted in the light of the purchasing power of the country's currency, the quantity and quality of essential commodities, the efficiency and integrity of the government, and the attitude of state officials toward the rights of the individual.

Particular care must be taken to look behind official data given on the question of civil rights. Especially is this true at

present, when the same word or phrase is used in different senses by different governments. Democracy to one people is inconceivable without freedom of speech, press, assembly, religion, organization, and movement from place to place. In dictatorships and semi-dictatorships today, however, the word democracy is frequently incorrectly applied to governmental systems where numerous of the above mentioned freedoms are practically non-existent in the opinion of critics of fundamental government policies.

The replies to *The Questionnaire* present suggestive answers to the question as to how the various economic systems are meeting such wants of man as the desire for good food, clothing, shelter, working conditions and educational opportunities; for economic and international security; for a happy family life; for freedom of expression; for opportunity to participate in the economic, political and social life of the community; and for other psychical and spiritual satisfactions.

The facts presented, however, cannot be said to supply *conclusive* answers as to whether capitalism, democratic socialism or communism may best be depended upon to satisfy fundamental human needs. For one thing, the capitalist order in the countries here included is undergoing constant change; a democratic socialist order, in countries under Labor and Socialist control, has not as yet been achieved; while the communist system in Russia and elsewhere is of comparatively recent origin. Moreover, in appraising the success or failure of social institutions in various nations, due account must be taken of the country's natural and human resources, the effect of war upon the nation's economy, and such vital questions as long-term trends in employment, the extent of wealth and income inequalities, the health of the people, the degree of concentration of economic and political power, and other problems which this volume has not had space adequately to discuss.

It is hoped that the information here presented will lead to further study of the achievements, the failures and the future possibilities of capitalism, socialism, communism, and variants of these systems of thought and action, with a view of discovering which way of life is likely to satisfy to the greatest extent the all-round wants of man. For the struggle to achieve the satisfaction of these wants is bound to be waged with increasing vigor in the coming years; particularly the struggle to achieve economic and political security, while preserving and strengthening the forces making for a free society. In that struggle increasing numbers of people here and abroad are preparing for intelligent and dedicated service.

The following tables, released by the U. N. Department of Economic Affairs, July, 1948, cover some of the material in the preceding questionnaire answers and are included here for purposes of comparison.

Food Production Indices for Certain Countries, 1946-47

(1934-38=100)

Country	Index	Country	Index
Argentina	101	Ireland†	96
Austria	80	Italy	86
Belgium	71	Luxemburg	79
Brazil	106	Mexico	131
Bulgaria	66	Netherlands	88
Canada	126	Norway	95
Chile	124	Peru	113
China	92	Poland	46
Cuba	158	Portugal	97
Czechoslovakia	80	Rumania†	43
Denmark	94	Sweden	103
Finland	71	Switzerland	114
France	83	Turkey	113
French North Africa	85	Uruguay	94
Germany (tri-zone)	59	United Kingdom	113
Greece	83	United States	132
Hungary	57	Yugoslavia	56
India*	99		

*Including nonfood crops and excluding livestock products. †Excluding fruits and vegetables.

Industrial Production for Selected Countries

(1938=100)

Country	1st Qtr. 1946	1947	4th Qtr. 1947	Country	1st Qtr. 1946	1947	4th Qtr. 1947
Austria	47	68	74	Netherlands	56	85	108
Belgium	77	105	113	Poland	79	121	137
Canada	157	172	175	Sweden	108	111	111
Denmark	99	112	118	United Kingdom	98	113	124
France	64	94	94	United States	175	210	216
Mexico	112	130	127	World	100	128	135

Number of Unemployed in Certain Countries

(monthly averages in thousands)

Country	1937	1938	1947	Country	1937	1938	1947
Austria	321.0	...	52.8	Italy .....	...	...	2025.1
Belgium	126.5	174.0	67.7	Netherlands	324.0	303.4	30.7
Canada	733.0	875.0	98.0	Poland ⁴	375.1	347.5	69.4
Chile	3.2	4.6	4.9	Sweden	67.4	67.0	24.2
Finland	3.7	3.6	4.2	Switzerland	57.9	52.6	3.5
France	354.6	373.6	7.4	U. of So. Africa .....	...	474.8 ³	139.0
Germany ¹ .....	...	69.6 ²	1072.0 ³	United Kingdom .....	...	1786.5	281.1
Hungary	15.2	17.8	79.6	United States	7273.0	9910.0	2142.0

¹All zones. ²1939 prewar boundaries. ³January to Sept. only. ⁴Prewar boundaries, 1937 and 1938. ⁵1940.

Cost of Living Indices for Certain Countries

Country	Base year	Specified prewar year=100				1946 first half=100		
		1946		1947		1947		
		First half	First quarter	Fourth quarter	First quarter	First quarter	Fourth quarter	First quarter
Argentina (Buenos Aires).....	1938	156	171	187 ¹	...	110	120	...
Australia.....	1938	127	130	136	139	102	107	109
Austria (Vienna).....	1938	145 ²	198	451	460	137	311	317
Bolivia (La Paz).....	1938	393	470	506 ³	...	119	129	...
Brazil (Rio de Janeiro).....	1938	206	273	270	...	133	131	...
Bulgaria.....	1939	570	633	659	...	111	116	...
Burma (Rangoon).....	1938	...	369	374	...	...	...	...
Canada.....	1938	118	125	141	147	106	119	125
Ceylon (Colombo).....	1939	224	249	250	256 ⁴	111	112	114
Chile (Santiago).....	1938	250	334	383	398	134	153	159
China (Shanghai).....	1938	179,784	(⁵)	(⁵)	(⁵)	406	2,677	6,640
Colombia (Bogotá).....	1938	179	207	223	233 ¹	116	125	130
Costa Rica (San José).....	1938	174	205	210	213 ¹	118	121	122
Czechoslovakia (Prague).....	1938	326	326	302	307	100	93	94
Denmark.....	1938	157	159	164	164	101	104	104
Dominican Republic (Ciudad Trujillo).....	1941	191	218	223	228	114	117	119
Egypt.....	1939	287	281	281	281 ¹	99	98	98
Finland.....	1938	437	497	687	764 ¹	114	157	175
France ⁴	1938	573	980	1,501	...	171	262	...
Greece (Athens).....	1939	20,034 ⁵	(⁵)	(⁵)	...	104	129	...
Hungary (Budapest).....	1938	(⁶)	404	496	495	100 ⁷	123 ⁷	123 ⁷
Iceland (Reykjavik).....	1939	287	312	326	319	109	114	111
India (Bombay).....	1938	234	251	273	261	107	117	112
Indo-China (Saigon).....	1939	1,298 ⁸	2,255	2,785	2,968	174	215	229
Iran.....	1938	637	607	...	...	95	...	...
Iraq (Baghdad).....	1939	574	543	708	718 ¹	95	123	125
Ireland.....	1938	168	171	178	182	102	106	108
Italy.....	1938	...	3,726	5,108	4,855	100 ⁷	137 ⁷	130 ⁷
Lebanon (Beirut).....	1939	564	511	501	502	91	89	89
Luxembourg.....	1938	262	271	287	291	103	110	111
Mexico (Mexico City).....	1938	255	304	310	316	119	122	124
Netherlands.....	1938	186 ⁹	197	197	200 ¹	106	106	108
Netherlands Indies (Batavia).....	1938	1,384 ²	3,178	1,852	1,664	230	134	120
Newfoundland (St. Johns).....	1938	163	167	178	183	102	109	112
New Zealand.....	1938	120	120	129	131	100	108	109
Norway.....	1938	158	160	157	159	101	99	101
Pakistan (Lahore).....	1938	329	354	...	...	108	...	...
Palestine: Arab.....	1942	150	164	168	179 ¹	109	112	119
Jewish.....	1942	148	155	158	177 ¹	105	107	120
Panamá (Ciudad de Panamá).....	1940	164	191	199	192	116	121	117
Paraguay (Asunción).....	1938	232	275	324	332 ¹	119	140	143
Peru (Lima).....	1938	192	220	298	325	115	155	169
Philippines (Manila).....	1938	598	419	...	...	70	...	...
Poland (Warsaw).....	1938	10,361	(⁵)	(⁵)	...	134	153	...
Portugal (Lisbon).....	1939	208	217	207	204	104	100	98
Puerto Rico.....	1941	150	182	182	182	121	121	121
Rumania (Bucharest).....	1938	22,593 ¹⁰	(⁵)	...	...	413	...	...
Southern Rhodesia.....	1938	127	130	135	137	102	106	108
Spain.....	1938	332	412	441	453	124	133	136
Sweden.....	1938	146	153	159	154	105	109	105
Switzerland.....	1938	150	155	163	163	103	109	109
Turkey (Istanbul).....	1938	353	350	343	...	99	97	...
Union of South Africa.....	1938	134	137	141	143	102	105	107
United Kingdom.....	1938	130	131	(¹¹)	(¹¹)	101	...	...
United States.....	1938	130	153	164	166	118	126	128
Uruguay (Montevideo).....	1938	150	169	180	179	113	120	119
Venezuela (Caracas).....	1938	144	155	181 ¹	...	108	126	...

¹Two months only. ²April-June. ³Magnitude of changes subsequent to first half of 1946 shown by percentages in last three columns. ⁴Heat, light and cost of food; index reflects not only price increases but also transfer of commodities from controlled to free markets. ⁵March only. ⁶509 followed by fifteen zeros. ⁷Base: first quarter 1947=100. ⁸March-June only. ⁹Four months only. ¹⁰Annual average. ¹¹New index: June, 1947=100; 105 in first quarter of 1948.

Postwar International Loans and Grants to June 1, 1948

(In millions of U.S. dollars)

Source: U.N. Department of Economic Affairs.

Recipient country	Lending governments					Lending international agencies			Lending private investors			Total	
	Argentina	Canada	Sweden	U. K.	U. S. ¹	Others ²	Inter-national Bank	Inter-national Monetary Fund	UNRRA	U. K.	U. S.		Others
Albania.....	40 ³	...	...	26	...	...	...	66
Argentina.....	4	...	4
Australia.....	7	...	...	...	...	...	...	...	7
Austria.....	80	329	...	...	...	136	12	...	...	557
Belgium.....	26 ⁴	100	...	...	201 ⁵	10 ⁶	...	33	...	...	...	247	394
Bolivia.....	63	...	...	...	...	...	...	...	...	...	...	...	63
Brazil.....	80	...	...	...	...	...	...	...	80
Bulgaria.....	4 ⁸	...	...	...	...	...	...	4
Burma.....	122	5	...	...	...	...	...	...	...	127
Canada.....	300	...	16	9	...	...	187	...	487
Chile.....	125 ⁹	...	...	...	47	...	...	...	...	...	4	...	201
China.....	...	60	...	...	260	...	...	...	521	...	40	...	881
Colombia.....	...	19	7	30	13	34 ¹⁰	...	...	262	4	...	...	13
Czechoslovakia.....	30	...	40	7	...	...	...	...	386
Denmark.....	33	...	50	...	...	...	...	...	...	13 ¹¹	143
Ecuador.....	3	...	...	...	...	...	...	...	3
Egypt.....	7	...	...	...	...	...	...	...	7
Eire.....	10	...	...	...	...	...	...	...	10
Ethiopia.....	2	...	4	...	...	...	1	...	...	...	7
Finland.....	19	...	53	...	113	10 ¹²	...	...	3	...	...	...	198 ¹³
France.....	150	242	22	403	2,648	45 ¹⁴	250	125	...	62	...	107	3,957
Germany (U. S. and U. K. zones).....	952	924	...	...	...	351 ¹⁵	...	...	...	1,876
Greece.....	40	460	...	...	...	4	2	...	...	851
Hungary.....	2	16	4 ¹⁶	...	...	...	...	...	...	28
Iceland.....	1	...	...	...	...	...	...	...	1
India.....	28	...	...	...	...	28
Iran.....	38	...	...	...	...	...	...	...	38
Iraq.....	1	...	...	...	...	...	...	...	1
Italy.....	175	...	...	220	950	6 ¹⁷	...	...	418	40	...	50 ¹⁸	1,859
Japan.....	783	...	...	...	...	...	...	...	783
Korea.....	247	...	...	...	1	...	...	...	248
Lebanon.....	5	...	...	...	...	...	...	...	5
Liberia.....	19	...	...	...	...	...	...	...	19

Recipient country	Lending governments					Lending international agencies			Lending private investors			
	Argentina	Canada	Sweden	U. K.	U. S. ¹	Others ²	Inter-national Bank	Inter-national Monetary Fund	UNRRA	U. K.	U. S.	Others
Luxemburg.....	...	...	...	...	...	...	12	...	...	...	...	...
Mexico.....	...	...	...	...	137	...	...	23	...	...	...	...
Netherlands.....	25	125	22	8	508	621 ⁹	195	69	...	...	28	12 ⁷
Netherlands Indies.....	...	15	...	...	200	242 ⁰	...	...	...	...	...	...
New Zealand.....	...	...	...	...	6	...	...	...	...	...	...	...
Norway.....	...	30	67	...	121	...	...	3	...	...	26	...
Panamá.....	...	...	...	...	...	...	...	...	...	...	1	...
Paraguay.....	3	...	...	...	...	41 ²	...	...	...	...	...	...
Peru.....	...	...	...	...	5	...	...	...	...	...	...	...
Philippines.....	...	...	...	...	404	...	...	...	10	...	...	...
Poland.....	...	...	34	24	90	493 ²¹	...	...	479	30	...	...
Saudi Arabia.....	...	...	...	...	27	...	...	...	...	...	...	...
Siam.....	...	...	...	...	10	152 ²	...	...	...	...	...	...
Spain.....	195	...	...	...	...	...	...	...	...	...	2	...
Sweden.....	...	...	...	...	...	72 ³	...	...	...	...	...	...
Trieste.....	...	...	...	...	15	...	...	...	...	...	...	...
Turkey.....	...	...	...	...	152	...	...	5	...	...	...	...
U.S.S.R.....	...	3	275	16	242	...	...	...	249 ²⁴	...	...	...
U.K.....	...	1,250	...	...	4,800	320 ²⁵	...	300	...	...	...	...
Venezuela.....	...	...	...	...	4	...	...	...	...	...	...	...
Yugoslavia.....	...	...	...	...	...	21 ⁶	...	...	417	...	...	...
Total.....	781	1,844	515	1,897	14,272	1,080	513	602	2,878	150	292	109

¹Includes \$1,186 million of grants and credits from the U. S. Economic Co-operation Administration as a tentative allocation for three months from April-June, 1948.

²Totals for lending countries not listed (in millions of U. S. dollars): Australia, 26; Belgium, 62; Brazil, 59; Czechoslovakia, 4; Denmark, 15; Egypt, 14; India, 15; Mexico, 5; New Zealand, 23; Switzerland, 17; Union of South Africa, 320; Uruguay, 2; Yugoslavia, 40.

³By Yugoslavia.

⁴Loan to Belgium-Luxemburg.

⁵Includes \$20 million allocation to Belgium-Luxemburg by the U. S. ECA.

⁶By Switzerland to Belgium-Luxemburg.

⁷By Swiss investors.

⁸By Czechoslovakia.

⁹Not yet ratified as of May, 1948.

¹⁰By Australia, \$2 million; Brazil, \$20 million; Egypt, \$4 million; Mexico, \$5 million; New Zealand, \$3 million.

¹¹By Swiss investors, \$7 million; by Swedish investors, \$6 million.

¹²By Brazil.

¹³An additional loan of \$1 million was made by the Bank for International Settlements.

¹⁴By Brazil, \$25 million; New Zealand, \$20 million.

¹⁵Includes \$4 million granted to Dodecanese Islands.

¹⁶By Egypt.

¹⁷By Egypt, \$4 million; Uruguay, \$2 million.

¹⁸By Canadian investors.

¹⁹By Belgium.

²⁰By Australia.

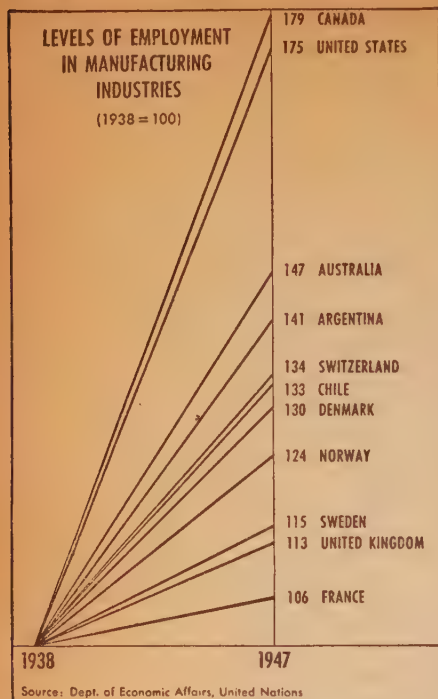
²¹By Denmark, \$15 million; by U.S.S.R., \$478 million.

²²By India.

²³By Switzerland.

²⁴Of which \$61 million went to Byelorussian S.S.R. and \$188 million to Ukrainian S.S.R.

²⁵By Union of South Africa.



**Employment Indices for Manufacturing
Industries of Certain Countries**
(1938=100¹)

Country	1937	1946	1947	1948 ²
Argentina.....	96	132	141	...
Australia.....	96	138	147	149
Austria ³	100	133	135	134
Canada.....	103	168	179	181
Chile.....	95	125	133	...
Czechoslovakia...	100	85	94	...
Denmark.....	101	116	130	132
Finland.....	...	114	123	127
France.....	96	96	106	...
Ireland.....	100	113	120	...
Luxemburg ³	98	86 ⁴	88 ⁵	...
Norway.....	...	111	124	130
Palestine ³.....	...	147	140	...
Sweden.....	99	117	115	118
Switzerland.....	100	124	134	136
U. of So. Africa...	96	138	142	...
United Kingdom...	105	103	113	115
United States.....	118	159	175	178

¹Finland and Norway, 1941=100. ²First quarter.
³General index covering wage earners and salaried employees in mining, manufacturing, construction, transport, commerce, personal and public services.
⁴July-December only. ⁵January-June only.

Agriculture

According to preliminary indices, the increase in agricultural crops in 1946-47, over the preceding year, offset low levels of output of livestock products and raised the aggregate production of agricultural commodities to 94 percent of the 1934-38 average of 100 percent.

Wages and Earnings Indices for Certain Countries
(1938=100¹)

Country	Earning period	1946	1947		1948
		First half	First quarter	Fourth quarter	First quarter
Argentina.....	Monthly	158	201	250 ²	...
Australia.....	Hourly	133	143	155	...
Bulgaria.....	Daily	629	753 ³	731 ³	...
Canada.....	Weekly	121	132	145	146
Chile.....	Daily	368	474	565	...
Colombia (Bogotá)...	Daily	171	...	...	...
Czechoslovakia...	Hourly	302	309	317	317
Denmark.....	Hourly	170	178	...	...
Finland ⁴ (Helsinki)...	Hourly	426	626	793	...
France.....	Hourly	479	668 ³	767 ³	...
Ireland.....	Weekly	129	145 ³	155 ³	...
Netherlands ⁴	Hourly	161	166	172	175
New Zealand ⁴	Weekly	132	135	145	...
Norway ⁴	Hourly	138	...	...	...
Palestine.....	Daily	367	393	...	...
Sweden.....	Hourly	160 ⁵	...	...	...
Switzerland.....	Hourly	157	171	178	...
United Kingdom.....	Weekly	160	166	...	...
United States.....	Hourly	166	187	202	206
Uruguay.....	Monthly	170	...	...	...

¹Base of 1 month in 1939 for Czechoslovakia, Finland and Ireland; March-December, 1941, for Canada.
²Two months only. ³Six-month period. ⁴Male workers only. ⁵Full year.

LEADING COUNTRIES OF THE WORLD IN VARIOUS RICHES AND NATURAL RESOURCES

Source: *Encyclopaedia Britannica*.

(Footnotes at end of table. In designations "No Data," relative rank of nation is estimated.)

MINERAL PRODUCTION	Country and rank									
	1	2	3	4	5	6	7	8	9	10
COAL (Millions of short tons, all grades, 1946)	U. S. 593	Germany 275	United Kingdom 212	U. S. S. R. 177	France 55	Poland 52	Czechoslovakia 37	India 33	U. of South Africa 26	Belgium 25
CRUDE PETROLEUM (Millions of bbls., 1946)	U. S. 1,733	Venezuela 388	U. S. S. R. 164	Iran 146	Saudi Arabia 60	Mexico 49	Iraq 35	Rumania 31	Colombia 22	Argentina 21
COPPER (Thousands of short tons, 1946)	U. S. 609	Chile 492	Northern Rhodesia 205	Canada 183	U. S. S. R. 176 ¹	Belgian Congo 159	Mexico 67	U. of South Africa 29	Peru 27	Japan 19
BAUXITE (Thousands of short tons, 1946)	British Guiana 1,254	U. S. 1,202	Hungary 922 ¹	Surinam 629	France 527	U. S. S. R. 440 ¹	Neth. Indies 300 ²	Yugoslavia 165 ²	Gold Coast 129	Italy 72
IRON ORE (Millions of short tons, 1946)	U. S. 79	U. S. S. R. 201	France 18	U. K. 14	Sweden 41	Germany No data	Korea 42	Spain 3	India 31	Luxemburg 2
TIN ORE (Thousands of short tons, 1946)	Bolivia 42.4	Bel. Congo 15.8	Nigeria 12.6	Neth. Indies 9.8	Malaya 8.2	China 3.9 ¹	Australia 2.4	Japan 2.0	Spain 1.5	U. K. .9
ZINC (Thousands of short tons, smelter production, 1946)	U. S. 772	Canada 186	U. S. S. R. No data	Belgium 95	Australia 87	U. K. 73	Poland 62	Mexico 46	Norway 34	France 34
GOLD (Thousands of fine ounces, 1946)	U. of South Africa 11,918	U. S. S. R. 6,000 ³	Canada 2,833	U. S. 1,462	Australia 824	Gold Coast 587	Southern Rhodesia 545	Colombia 437	Mexico 421	Belgian Congo 331
SILVER (Millions of fine ounces, 1946)	Mexico 43	U. S. 21	Canada 13	Peru 12	Australia 9	Eolivia 6	U. S. S. R. No data	Belgian Congo 5	Honduras 3	U. of South Africa 1
CHROMITE (Thousands of short tons, 1945)	U. S. S. R. 358 ⁴	U. of South Africa 208	Cuba 192	Southern Rhodesia 167	Turkey 121	Yugoslavia 72 ⁴	Philippines 64	India 34 ¹	New Caledonia 27	Greece 9

Leading Countries of the World in Various Riches and Natural Resources—(cont.)

	Country and rank									
	1	2	3	4	5	6	7	8	9	10
MINERAL PRODUCTION										
LEAD (Thousands of short tons, smelter production, 1946)	U. S. 338	Australia 169	Canada 166	Mexico 152	U. S. S. R. 121 ²	Peru 40	France 38	Spain 36	Belgium 25	Argentina 18
URANIUM	The most important deposits are in Belgian Congo and Northwest Territories, Canada. Deposits are also found or reported in Ceylon, Dominion of India, Netherlands Indies, Australia, France, Germany, U. S., U. S. S. R., Bulgaria, Madagascar, Czechoslovakia, Portugal, Sweden, Norway, Mexico, England, Brazil and Spain. Production data are not available.									
AGRICULTURE, FISHING, AND FORESTRY										
CULTIVATED LAND (Millions of acres, latest data available)	U. S. S. R. 387.9	U. S. 348.4	India ³ 260.4	China 122.9	Argentina 67.4	Canada 62.7	Germany No data	France ⁶ 46.9	Australia 32.3	Italy 27.6
MILK (Thousands of metric tons, 1946)	U. S. 54,308	U. S. S. R. No data	Germany 13,195	France 10,820	United Kingdom 8,569	Canada 7,683	Australia 4,836	Sweden 4,680	Denmark 4,603	New Zealand 3,712
BUTTER (Thousands of metric tons, 1946)	U. S. 681	Germany 285	U. S. S. R. No data	Australia 153	France 152	Canada 149	Denmark 141	New Zealand 129	Sweden 92	Netherlands 53
CHEESE (Thousands of metric tons, 1946)	U. S. 499	Germany No data	Italy 137	France 125	New Zealand 95	Argentina ² 91	Canada 67	Netherlands 53	Denmark 52	Sweden 44
MEAT (Thousands of metric tons, monthly average, 1947)	U. S. 613.7	U. S. S. R. No data	Argentina 76.97 ⁸	Australia 75.9 ⁹	United Kingdom 66.0	Canada 50.1	Germany 34.0 ¹⁰	Czechoslovakia 33.9 ¹¹	Denmark 33.6 ¹²	New Zealand 30.0 ¹³
CATTLE (Number in thousands, 1946)	India 158,894 ¹⁴	U. S. 81,050 ¹⁵	U. S. S. R. 46,800	Brazil 44,613 ¹	Argentina 34,000	China 19,828	France 15,130	Germany 13,982	Australia 13,874	Colombia 13,000
HORSES (Number in thousands, 1946)	U. S. S. R. 10,800 ¹⁵	Argentina 7,473 ¹	U. S. 7,251 ¹⁵	Brazil 6,522 ¹	India 3,843 ¹⁴	France 2,351 ¹⁶	Germany 2,208 ¹⁶	Canada 2,200 ¹⁵	China 2,055	Poland 1,730
HOGS (Number in thousands, 1946)	U. S. 56,901	China 48,549	Brazil 24,344 ¹	U. S. S. R. 8,600	Germany 8,407	France 5,278	Argentina 5,000	Canada 4,910 ¹⁷	India 4,032	Italy 3,000
SHEEP (Number in thousands, 1946)	Australia 96,396	U. S. S. R. 72,000	Argentina 53,000	U. S. 38,571 ¹⁵	New Zealand 33,975 ¹	U. of South Africa 33,503 ⁴	India 25,183 ¹⁸	Uruguay 25,000	Turkey 23,528	Spain 22,000
WOOL (Millions of pounds, 1947)	Australia 904	Argentina 506	New Zealand 350	U. S. 256	U. S. S. R. 230 ⁴	U. of South Africa 210 ¹⁹	Uruguay 136 ²	India 99 ⁴	China 90 ²⁰	United Kingdom 72

COTTON (Thousands of metric tons, 1946)	U. S. 1,873 ²¹	China 896	India 638	U. S. R. 477	Brazil 343	Egypt 273	Mexico 91	Argentina 66	Peru 62	Turkey 59
FOREST ACREAGE (Millions of acres, latest data available)	U. S. S. R. 2,346	Brazil 1,000	Canada 826	U. S. ²² 685	France ²² 290	Argentina 264	Nether-lands ²² 259	Peru 224	China 190	Belgium ²² 182
WHEAT (Millions of bushels, 1947)	U. S. 1,364	U. S. S. R. 875	China 789	Canada 341	India 334 ⁷	Australia 250	Italy 225	Argentina 175	Turkey 135	France 134
OATS (Millions of metric tons, 1946)	U. S. 21.9	U. S. S. R. No data	Canada 6.2	France 3.8	Germany 3.0	United Kingdom 2.9	Denmark 1.1	Poland 1.0	Argentina .8	Czecho-slovakia .8
CORN (Maize) (Millions of metric tons, 1946)	U. S. 75.9	China 7.7	Manchuria 4.1	Mexico 2.3	India 2.2	Italy 1.9	Yugo-slavia 1.5	Egypt 1.4	Hungary 1.4	Rumania 1.0
POTATOES (Millions of metric tons, 1946)	U. S. S. R. No data	Germany 23.6	Poland 18.7	U. S. 13.0	France 12.1	United Kingdom 10.3	Czecho-slovakia 9.0	Nether-lands 4.1	Eire 3.3	Spain 3.0
RICE (Millions of metric tons, 1946)	China 47.3	India 42.9	Japan 11.5	French Indo-China 7.2 ²³	Java, Madura 5.3	Burma 3.9	Siam 3.6	Korea 2.2	Philippines 2.0	U. S. 1.5
BET SUGAR (Production in millions of metric tons, 1946)	U. S. S. R. 2.4	U. S. 1.3	Germany .94	France .69	United Kingdom .57	Czecho-slovakia .54	Poland .38	Sweden .26	Italy .25	Nether-lands .23
CANE SUGAR (Production in millions of metric tons, 1946)	Cuba 5.5	India 3.2 ²⁴	Brazil 1.4	Puerto Rico .93	Hawaii .74	Argentina .63	Australia .55	U. of South Africa .50	Dominican Republic .46	Peru .41
RUBBER (Production in thousands of short tons, 1947)	Malaya 645	U. S. 509 ²⁵	Neth. Indies 270	Ceylon 89	Siam 51	Canada 42 ²⁵	French Indo-China 42	Brazil 20	India 17	Nigeria 12 ^{7, 13}
COMMERCE, INDUSTRY, AND COMMUNICATIONS										
STEEL (Production in millions of short tons, 1946)	U. S. 79.3	U. S. S. R. 21.4 ²⁶	United Kingdom 13.6	France 4.9	Sweden 4.3 ¹	Korea 3.7	Germany 3.2 ²⁶	Spain 2.6	Belgium 2.5	Canada 2.3

Leading Countries of the World in Various Riches and Natural Resources—(cont.)

	Country and rank									
	1	2	3	4	5	6	7	8	9	10
COMMERCE, INDUSTRY, AND COMMUNICATIONS										
PIG IRON (Production in millions of short tons, 1946)	U. S. 46.3	U. S. S. R. 9.9 ¹	United Kingdom 8.7	France 3.9	Germany ¹⁰ 2.6	Belgium 2.4	Canada 1.5	Luxemburg 1.5	India 1.5	Czechoslovakia 1.1
ALUMINUM (Production in thousands of short tons, 1946)	U. S. 409.6	Canada 193.4	U. S. S. R. 95.1 ¹	France 52.4	Switzerland 37.4 ²	United Kingdom 35.3	Norway 18.3	Italy 11.7	Germany 11.5 ²⁷	Japan 6.0 ¹
ELECTRICITY (Production in millions of kwh., monthly average, 1947)	U. S. 21,310	Canada 3,754	United Kingdom 3,548 ²⁸	U. S. S. R. No data	Japan 2,346	France 2,087 ²⁹	Italy 1,496 ²⁹	Germany 1,392 ¹⁰	Sweden 991 ³⁰	Norway 938
INDUSTRIAL PRODUCTION, Index, 1947 (1937 = 100)	U. S. 165	Canada 163	Chile 158 ²⁹	Bulgaria 152 ²⁹	Mexico 131 ³⁰	Norway 115	Poland 114 ^{30, 31}	Denmark 112	Eire 109 ³⁰	Sweden 108 ²⁹
EXPORTS (Millions of U. S. dollars, monthly rate, Jan.-June 1947)	U. S. 1,214 ²⁹	United Kingdom 346	Canada 252	France 149	Argentina 119 ³²	Belgium ³³ 108	Brazil 92 ³²	Australia 82 ³⁴	Italy 62	Switzerland 62
IMPORTS (Millions of U. S. dollars, monthly rate, Jan.-June, 1947)	United Kingdom 551	U. S. 467 ²⁹	France 234	Canada 232	Italy 170 ¹	Belgium ³³ 139	Netherlands 122	Sweden 105	Brazil 102 ³²	Switzerland 87
MOTOR VEHICLES (Number in thousands, various dates)	U. S. (1947) 37,164	United Kingdom ⁷ 2,592	Canada ⁷ 1,605	France ⁷ 1,593	Australia ⁴⁴ 927	U. S. S. R. No data	Argentina (1939) 406	U. of South Africa (1940) 369	New Zealand ⁴⁴ 339	Italy No data
RAILROAD MILEAGE (Various dates)	U. S. ⁴⁴ 227,679	U. S. S. R. ¹ 66,000	Canada ¹ 42,509	India ² 40,925	Germany (1939) 36,400	Australia ⁴⁴ 27,180	Argentina ⁷ 26,384	France ¹ 25,271	Brazil ⁴⁹ 22,000	United Kingdom ⁴⁹ 20,761
RADIO SETS (Number in millions, 1947) ³⁵	U. S. 66.0	United Kingdom 10.8	U. S. S. R. 10.6 ^{7, 36}	Japan 6.8	France 5.7	Germany 5.5 ⁷	Sweden 1.9 ⁷	Canada 1.8 ⁷	Australia 1.8	Italy 1.5 ⁷
MERCHANT FLEETS (Thousands of gross tons, 1947) ³⁷	U. S. 30,901	United Kingdom 15,176	Norway 3,435	Netherlands 2,224	France 1,964	Panamá 1,955	Sweden 1,569	Italy 1,401	U. S. S. R. 1,306	Greece 1,237
HUMAN RESOURCES										
HIGHEST ANNUAL BIRTH RATES (Per 1000 of population, 1947) ³⁸	Costa Rica 54.3	Mexico 45.1	Palestine 44.4 ^{7, 39}	El Salvador 41.3	Ceylon 40.5 ⁴	Venezuela 38.5 ⁷	Egypt 38.1 ²⁰	Panamá 36.4	Nicaragua 34.8	Japan 34.8

LOWEST ANNUAL DEATH RATES (Per 1000 of population, 1947)

MEN OF MILITARY AGE (20-44 years, estimated in thousands, various dates)

MILITARY FORCES (Unofficial estimates)

ARMIES (Strength in thousands, 1948)

NAVIES (Tonnage, in thousands, 1947)⁴⁷

AIR FORCES (Number of planes, 1947)

11945.

21944.

3Approximation based on prewar production.

41943.

5Prior to partition.

687 of 90 departments.

71946.

8Freezing plants and factories.

9Twelve months ending June 30, 1947.

10U. S. and British zones.

11Meat supply.

12Beef and pork.

13Exports.

14Not including native states.

15On farms only.

16Excluding army horses.

17Rural districts only.

181940 census, excluding United Provinces and Orissa.

191946-47.

201943; including Manchuria.

21Not including 254,500 metric tons of liners.

22Including possessions or colonies.

231942.

24Estimate of refined sugar (taking 100 units of "gur," a low-grade sugar, as 60 units of refined sugar).

25Synthetic only.

261946-47, Russian zone excluded.

271946-47, British zone only.

28Excluding Northern Ireland.

29Eleven months average for year indicated.

30Nine months average for year indicated.

311938-1900.

32Eight months average for year indicated.

33Including Luxembourg.

34Monthly average for fiscal year 1946-47.

351946 data by Caldwell-Clements, Inc.

36Including amplifiers hooked to relay exchanges.

37Ships of 1,000 gross tons or more.

38Crude rates; stillbirths not included.

39Settled population only.

40European population only.

41Excluding Yukon and Northwest Territories.

42Excluding Maoris.

43Excluding jungle population.

441947.

45Service appropriation bill for 1948-49 projected strength of 790,000 by July 1, 1949.

46Including police forces.

47Tonnage includes only battleships, battle cruisers, aircraft carriers, cruisers, destroyers and submarines.

48All military aircraft in operation, reserve and storage; figures for other countries include only aircraft available for immediate use.

491948.

REVIEW OF THE YEAR



WASHINGTON AT HOME AND ABROAD

by BERT ANDREWS

Chief, Washington Bureau, N. Y. Herald Tribune

ANY ONE of a score of great events enacted on the Washington stage in 1948 would have made it an extraordinary year. Taken together, they made it a fateful one in world history.

There was, first and foremost of all, the "cold war" in which the might and prestige of the United States and the nations that followed its leadership were aligned against the ideology and power of Soviet Russia and her satellites.

There were other vivid and engrossing chapters. Many of them tied in directly or indirectly with that conflict.

There were, for a few examples:

The Red spy scare which had the nation agog and men of Congress busy investigating. The revelations of Elizabeth T. Bentley, Vassar-educated wartime Communist espionage agent. The mystery revolving about Mrs. Oksana Stepanovna Kasenkina, Russian school teacher who leaped from a window of the Russian consulate in New York City rather than return to the country behind the iron curtain. The order to Soviet Consul General Yakov M. Lomakin to pack up and go home because of the statements he made in the case—statements that violated all rules of diplomatic behavior. The closing of the U. S. consulate in Russia, and vice versa.

There were these other developments:

The rise of Thomas E. Dewey in national and international eminence. The struggle of President Harry S. Truman to "stop Dewey" in the national election. The hubub caused by the Progressive party, with Henry A. Wallace as its leader, and the Dixiecrats, with Governor J. Strom Thurmond, of South Carolina, carrying the banner of the die-hard States' Rights advocates.

And these:

Revival of the draft to keep America's armed forces up to needed strength. Improvement of atomic weapons. Soaring costs. Enlargement of the Air Force. Enactment of the greatest foreign-aid program ever attempted by the United States in time of peace. The Vandenberg resolution paving the way for American military sup-

port of the Western European alliance. The civil rights issue. Tremendous prosperity, in the sense of full employment and high incomes, but with inflation biting large chunks out of every man's pay check.

One spectacular but futile political chapter, of course, was the emergence of Mr. Wallace's third party, backed by Communists and "peace-wanters." Here was the most ambitious movement of its kind since the late Robert LaFollette bucked the Republicans and Democrats in 1924 and polled 4,000,000 votes from men and women who didn't like the way the major parties had handled America's affairs. Like LaFollette, Mr. Wallace made noise but had no luck.

Another remarkable political chapter was the split in the Democratic party over the issue of civil rights—meaning Negro rights—which gave rise to the States' Rights Democrats in the South in organized form.

The trouble began when President Truman submitted to Congress a program calling for anti-lynching and anti-poll tax bills, a fair employment practices act, anti-Jim Crow legislation and other measures to bar discrimination. Now President Truman did not actually ask for much more than his predecessor, F. D. Roosevelt, had. Nor more than the platforms of the Republican and Democratic parties had given lip service to in the past. The difference was that he asked for it now—this year—and not in the uncertain future.

At the top of their lungs, Southerners in the Senate and the House of Representatives shouted threats of revolt against the President in the days before the Democratic National Convention in Philadelphia nominated him for a full term.

Cooler and theoretically wiser heads in the party thought they had a nice solution all cooked up, one that would stop the party brawl. They would write into the 1948 Democratic platform the same kind of meaningless and inoffensive civil rights plank that appeared in the 1944 platform. Just talk piously about civil rights and let it go at that. No recommendation for specific measures, such as anti-poll tax legislation.

At the convention, the platform committee saw the political sense of all this and went along with it. Everything was fine until the platform draft reached the convention floor. Then came the explosion. A group of liberals offered a minority report proposing that the platform give complete endorsement to the President's civil rights program. The South voted solidly against it, naturally. But delegations from the big cities of the North and West—cities where the votes of the Negroes mean something—swung behind the proposal. It was swept into being on a tide of New Deal, labor and liberal votes. And Southerners cursed the day when Roosevelt hammered the party into abandonment of the two-thirds rule that had long let the State's Rights people control the party.

The entire Mississippi delegation and half the Alabama delegation bolted the convention.

Two days after the Democratic people departed from Philadelphia, the rebels, familiarly known as Dixiecrats, met in Birmingham and chose their own candidates. Governor Thurmond, of South Carolina, was nominated for President. Governor Fielding L. Wright, of Mississippi, was named as his running mate. What the Dixiecrats wanted, essentially, was for the Federal government to keep its hands off the racial problem of the South. Leave the matter to the states, they demanded.

The rise of the Dixiecrats created enigmas of importance to future years, as well as to 1948. The top one was: Will the land below the Mason-Dixon Line still be the Solid South for the Democratic party?

An unusually spicy drama of 1948 was the bitter struggle between a Republican-controlled Congress and the Democratic Administration. It was the fiercest since the troubles Herbert Hoover had in the last days of his Administration with the Democrats in Senate and House.

President Truman called the Republican-dominated Congress "the worst Congress," and then modified his opinion by saying that maybe it was only the second worst. He said it was a "do-nothing" Congress. He said it favored "special interests." The only way to take the measure of the 80th Congress, Mr. Truman said, was to observe what it had done to rather than for the American people. The Republicans fought back. They said Mr. Truman was the "worst President," and they didn't qualify the statement. They called him all sorts of names, including "High Tax Harry," this because of his veto of an income tax reduction bill that was subsequently passed over the veto. One Senator moved up into the big league of Billingsgate with a quip about the President: "That impudent Ajax from the Ozarks."

As for legislation, it would be said that

Mr. Truman's major proposals bearing on foreign affairs were adopted and that his major proposals on domestic affairs were tossed into the ashcan. There were exceptions, but that was the general rule. It was notably true in the case of the President's anti-inflation and housing programs, which Congress repeatedly refused to enact.

The President said he must have new grants of authority in order to stop inflation.

The Republican majorities retorted that he wanted powers held only by leaders of police states.

Yet another unforgettable political chapter concerned two generals. One wanted to be President but could never get his bandwagon rolling. He was Douglas MacArthur, whose only serious bid fizzled out in the Republican primary election in Wisconsin, and who learned, when he received pitifully few votes at the Republican convention in Philadelphia, that the respect for his military leadership did not extend into the realm of politics.

The other general did not want to be President. But before he could make the nation believe it he had to resort to something approaching the language of another general, William Tecumseh Sherman, who said, "If nominated, I will not accept; if elected, I will not serve." This was Dwight D. Eisenhower, whose boom turned out to be one of the most unusual spectacles ever witnessed under the American system of politics.

Democratic leaders as diverse as James Roosevelt, in California; Jacob N. Arvey, in Chicago; and Frank Hague, in New Jersey, turned their backs on President Truman and launched an Eisenhower draft movement. The Democratic South, utterly unaware of General Eisenhower's precise stand on the civil rights issue, flung itself on the bandwagon on the theory that he wouldn't be as bad, anyway, as President Truman.

The boom might well have stampeded the convention if General Eisenhower had not done the thing that all sensible men knew he must do after his earlier statement. Three days before the Democratic convention, he sent a telegram to Philadelphia, saying: "No matter under what terms, conditions or premises a proposal might be couched, I would refuse to accept the nomination. . . ."

That did it.

The Democratic leaders had, in advance, condemned their convention and their candidate. And so, in a dispirited and bitterly divided conclave, President Truman was nominated. It was on the first ballot. But it was not unanimous, for the Southern rebels would not let it be so, even though a Southerner, Senator Alben W. Barkley,

of Kentucky, was nominated for Vice President. . . . The Republicans laughed.

They laughed because, for them, it was a good year. A year that brought demonstrations of growing unity. That is not to say that the Republican nomination was not the center of a fierce fight. There were rough primary contests.

Up and down the country, Governor Dewey, Harold E. Stassen, of Minnesota, Senator Robert A. Taft, of Ohio, Governor Earl Warren, of California, and General MacArthur's advocates battled for convention delegates. Senator Arthur H. Vandenberg, of Michigan, didn't battle. But his friends worked hard to get him the prize and he would have gladly grabbed it if it had been handed to him, as he hoped it would be and as it wasn't, on a platter.

At the convention, the behind-the-scenes struggle for votes was waged with intensity. The significant point was that when it became evident after the second ballot that Governor Dewey had the strength to win, the other contenders joined forces with him to make the nomination unanimous on the third ballot. There was no division, as in the Democratic party, to keep alive the rivalries of the primaries.

Throughout the subsequent campaign, Messrs. Stassen, Taft and Vandenberg supported Governor Dewey in a way that enabled the Republican party to present to the voters the kind of a united front which was so conspicuously lacking in the Democratic party. It was on that, and on the belief that the nation was fed up with the Democrats, that the Republicans banked.

Now, there have been times in the United States when, in an election, politics was the whole show. That was not true in 1948. In this year the American people were constantly forced to look beyond the fireworks of the campaign to the growing seriousness of the "cold war" between Russia and the Western powers. In all hearts—save perhaps in the hearts of the Russians who knew only what their leaders saw fit to tell them—was the question: Would it break into a shooting war whose end no man could foresee?

Just as Moscow was the capital of one side in the struggle, so was Washington universally recognized as the capital of the other. And as was completely understandable, the "cold war" played an enormously important part in the determination of American policy and legislation.

The regular session of Congress, in fact, was dominated not by domestic legislation, but by measures to match Russia's moves in the "cold war." Among the counter measures were the European Recovery Program, revival of the draft, expansion of the Air Force, the Vandenberg resolution on military aid, and appropriations to help

Greece, Turkey, and China in their opposition to the Communists.

Seldom, indeed, had there been a peacetime Congress so sensitive to affairs abroad. The Communist coup in Czechoslovakia, and Soviet pressure on Finland, scattered the opposition to the ERP with a March-wind thoroughness that could not have been achieved by volumes of political oratory and Administration pressure.

The isolationists were put to rout. Both the Senate and the House of Representatives passed ERP by margins of more than four to one. The Senate passed the Vandenberg resolution by a vote of 64 to 4. (The House didn't have to act on this.)

During the year, one international crisis after another was thrust upon the President. Notably, were those relating to Palestine and Germany—and the behavior of the Russian consul general in the Kasenkina case, which was linked with the four-power negotiations going on in Moscow.

The complex and continuing struggle between the Arabs and the Jews in the Holy Land had a deep effect on the United States and its policy.

In 1947, it will be recalled, the United States pushed through the U. N. General Assembly a plan for the partition of Palestine into Arab and Jewish States. "Pushed" was the word, too, for the United States wheedled and pleaded in ward-heeler fashion until it had lined up enough other nations to go along with its views.

Then, in 1948, on the recommendation of Secretary of State George C. Marshall and with the approval of President Truman, the United States stunned the world and threw the U. N. into a turmoil by rejecting its own plan for immediate partition in favor of an arrangement for a truce between warring Jews and Arabs and a U. N. trusteeship over the Holy Land.

This decision touched off a flaming controversy among the American people. It played a part in the election, for the puzzle was: What effect on the election would come from the resentment of the Jews, who have a large number of votes, particularly in key states like New York?

Without attempting here to pass judgment on the President's action, but merely reviewing events as they happened, there was a vast amount of argument.

Those who upheld the President insisted that the United States at that critical moment could not afford to send troops into Palestine to enforce partition. With the East-West conflict at fever pitch in Czechoslovakia, Italy, the Balkans and Germany, they contended that the United States had to hold its grievously inadequate forces in readiness for possible war in which American interests would be far

more vitally involved than they were in Palestine.

Moreover, they argued, if the United States sent troops into Palestine, to enforce partition under the auspices of the U. N. Security Council, Russian troops could surely move in likewise, thus militarily outflanking the American-supported Greeks and Turks and carrying Soviet power and influence to the shores of the Mediterranean and the oil-rich Middle East. From this point of view, the reversal of the Palestine policy was held to be in the highest interest of the United States.

Those who criticized the President's decision did so on many counts. They charged that it made a mockery of America's so-called moral leadership in the world. They said it was a devastating blow to U. N. prestige, a flagrant case of bowing to Arab threats. They said it made the United States appear more interested in oil than in the ethics of international agreements.

Some of the soberer critics saw the whole history of the President's handling of Palestine as a turn-turtle ineptness that made the United States look bad in the eyes of the world—regardless of whether what it did was right or wrong.

The denouement of the affair was almost as startling as the dramatic reversal in the U. N. On May 14, eight hours and twenty minutes after the Jews had gone ahead and proclaimed their own state of Israel regardless of how the United States felt about it, Mr. Truman formally extended *de facto* recognition to the provisional Israeli government.

There was much criticism of the Administration for poor coordination in foreign affairs, for giving the impression that the left hand knew not what the right hand was doing. This was particularly true in the Berlin situation where at times there was evidence that the State Department and the military leaders were working at cross purposes and it was difficult to know just who was making foreign policy.

On two occasions Congress forced a change of policy on the Administration in matters affecting foreign affairs. In one case it forced the Administration to extend military as well as economic aid to China. In another it authorized a seventy-group air force when the Administration favored fifty-five groups.

Nevertheless, the major measures of President Truman's foreign policy did command overwhelming support. And if President Truman was accused of fumbling and ineptness in handling certain aspects of foreign relations, still there was a feeling that he was sincere and, in general, on the right track.

For instance, it took political courage for the President to stand up before Congress

in an election year, as Mr. Truman did on March 17, and ask for immediate enactment of selective service and universal military training. This was necessary, he told Congress, to forestall the "clear design" of Russia ruthlessly to "extend its aggression to Western Europe."

Except for the Communists and Wallace and some of his followers, most Americans were gratified to see Mr. Truman "get tough" with Russia, in the Berlin crisis. They were glad, too, to see him remain cool and calm about it. A President who lost his head in a situation so grave and tense could have brought catastrophe on the world.

The various foreign aid programs, which Mr. Truman called "America's answer to the challenge facing the free world," won the warm and active support of most Americans of nearly all shades of political opinion, except the Communists and extreme Left. Perhaps the most valuable support came from Senator Vandenberg, chairman of the Senate Foreign Relations Committee, and John Foster Dulles, foreign affairs advisor to Governor Dewey.

It was almost inconceivable that ERP—the Marshall Plan—could have breezed through Congress as it did without Senator Vandenberg's and without Mr. Dewey's approving nod from the wings. It was not so much the eloquent and forceful support which Senator Vandenberg gave it that counted, as it was his skillful compromises in removing political stumbling blocks from the plan without destroying its essentials.

No review of the effects of international affairs on American policy in 1948 would be complete without mention of the very important effects on economic as well as on political policy.

On the one hand, the "cold war" produced such effects on American industry as the reopening of various airplane factories to supply the expanding air force, heavier demands by the National Military Establishment on the steel industry and certain, though surely minor, manpower readjustments resulting from the draft of men nineteen through twenty-five.

On the other hand, it led to changes in this nation's international trade policies. President Truman banned the shipment of aircraft and aircraft parts to Russia. To keep potentially vital war goods from moving from the United States to Russia or her satellites, the Department of Commerce brought the bulk of American exports under the requirements of the export licensing system on March 15.

Going still further, the Economic Cooperation Administration, which came into existence in April to administer the Marshall Plan, served notice on the seventeen

nations participating in ERP that they would forfeit American aid if they shipped war goods to Eastern Europe.

At its regular session Congress turned a deaf ear to ten of the seventeen major recommendations which the President made in his State of the Union message. These included:

The civil rights program; universal military training; increasing the minimum wage to 75 cents an hour; admitting Hawaii and Alaska to the Union as states; Federal aid to education; a national health program; a long-range housing program along the lines of the Taft-Ellender-Wagner bill, and a ten-point anti-inflation program, a cost-of-living tax credit, and expansion of social security.

Apart from the foreign-aid programs, and other measures closely related to foreign policy, Congress passed bills:

To continue farm price supports;

To extend rent controls, but in weakened form;

And to admit 205,000 displaced persons to the United States during the next two years.

Over the President's veto, it reduced income taxes, reduced the functions of the Department of Labor, and passed the Reed-Bulwinkle Act to give railroad rate agreements anti-trust immunity if approved by the Interstate Commerce Commission.

The only remarkable thing about the thirteen-day special session in July and August was the manner in which it was called—and the little that was done.

President Truman, in his acceptance speech at the Democratic Convention in the early morning hours of June 15, roused the apathetic delegates with a ringing declaration that he would call Congress back into session to give the Republicans a chance to practice what they preached about housing, prices and civil rights.

The President asked Congress to pass the Taft-Ellender-Wagner housing bill. He asked it to authorize wage-price controls. He recommended that the number of displaced persons admitted in the next two years be increased to 400,000. He urged Congress to authorize a \$65,000,000 loan for construction of the United Nations headquarters in New York.

The loan measure was the *only one* which the angry special session enacted in full.

Many of the President's recommendations were not even considered by the Congress. In fact, some of them didn't even reach the take-off point, which is consideration by committees. In the Senate, Southerners filibustered to death the anti-poll tax bill. Instead of the Taft-Ellender-Wagner housing bill, Congress passed a

measure designed to stimulate low-cost housing construction primarily through increasing loan and mortgage insurance guarantees.

In place of the President's comprehensive anti-inflation program, Congress passed a greatly watered-down bill restricting bank credits and reviving wartime Federal Reserve controls on installment buying.

But if the record of legislation passed at the special session was rather bare, the same could not be said of events before the Congressional investigating committees.

Capitol Hill and the entire nation were rocked by the testimony of Elizabeth Bentley, who testified that she had been a misguided idealist who had joined the Communist party and during the war had served as a courier for a Soviet espionage network.

She said that she had obtained secret military and political information and had given it to Russia. And where did she get this information? Here was her list of sources: the White House; the State and Treasury Departments; the Army and Air Force; the Office of War Information; the Office of the Coordinator for Inter-American Affairs; the Office of Strategic Services; the War Production Board.

After Miss Bentley came Whittaker Chambers, a senior editor of *Time* magazine, who said he also had been a former Communist courier.

He told a story of a Communist underground "apparatus" in Washington. Among its members, he testified, were Alger Hiss, president of the Carnegie Endowment for International Peace, and formerly a high State Department official; his brother Donald Hiss, also a former State Department official; Lee Pressman, former counsel to the Congress of Industrial Organizations; John Abt, an organizer for the Progressive party; Victor Perlo, Henry Collins and Charles Kramer. The person named by Miss Bentley and Mr. Chamberlain denied the charges.

Tops in drama was Mrs. Kasenkina's tale. She, whom the Russians wanted very badly indeed, escaped from Russian hands by leaping from the third floor of the consulate in New York. Approximately ten minutes before she jumped, President Truman had told a news conference in Washington that the spy hearings were a red herring—the worst type of red herring that you can smell. All the facts brought out at the hearings, the President said, had previously been presented to a grand jury but were not found to be sufficient grounds for indictment.

By using the red herring label, many believed, the President committed one

is most serious political boners. He presented Governor Dewey with a ready-made issue of capital importance.

The American people were distressed by the intimations of disloyalty in key government offices. If "misguided idealists" could smuggle to Russia an American formula for making synthetic rubber out of garbage, as Miss Bentley had testified, that assurance was there that they might not obtain for the Kremlin secrets about

the atomic bomb and bacteriological warfare?

Red herring or not, the spy trials and the Kasenkina case intensified the average American's distrust of Russia. They strengthened his belief that the United States was pursuing the right course in opposing Russian military expansion in Europe and the spread of Communism. This was a course down which the United States had traveled a long way in 1948.



SPORTS

by RED SMITH

Sports Columnist, N. Y. Herald Tribune

IN 1947, Leo Durocher, the man of letters, was honeymooning in Hollywood. In 1948, he returned to baseball. It did not necessarily follow that pastoral quiet would descend immediately upon the sports scene. As a matter of fact, although it would be inaccurate to ascribe the phenomenon to the presence of Durocher alone, the sports year of 1948 was distinguished by a raucous combativeness, characteristic of that gentleman, which infected virtually every game save prize fighting.

Professional golfers struck the keynote, and other targets, when they took to punching one another's features between rounds on the winter tournament circuit. Feeling ran so high that the game's rulers issued two orders: henceforth, gentlemen of the links were to strike only the ball in anger; and they would also be expected to play according to the rules. It is difficult to say which decree caused the greater consternation.

Even earlier, the University of Michigan football team had illustrated man's inhumanity to man by administering a scandalous flogging to Southern California in the Rose Bowl game in Pasadena, California. The score of 49 to 0 matched the course record for malevolence established by the 1902 Michigan team in the first tournament of Roses.

It had been mistakenly supposed that this game would resolve the question of superiority between Michigan and Notre Dame, an issue which had set husband against wife and bartender against consumer since midautumn. Notre Dame, having concluded its flord series with Army by dismantling the West Point team, had also polished off Southern California and, like Michigan, completed its season undefeated and untied. But although Michigan's score against Southern California exceeded Notre

Dame's, this only convinced the latter's followers that Michigan was deficient in the quality of mercy. The debate raged on in the bistros of the land.

Professional football, spiritually bloody and financially bowed after two seasons of warfare between the National League and the All-America Conference, went through 1948 still warring. In a deal not unlike that wherein the landlady impounds the delinquent roomer's baggage, Branch Rickey became president of the Brooklyn club in the All-America Conference. Ella Wheeler Wilcox would have been better cast in the role.

It was the first Olympic year since the brown-shirted pageant of 1936 in Berlin. This is not quite the same thing as a year of unruffled tranquillity, notwithstanding the founding fathers' dream of promoting "comity between nations." The Winter Games in St. Mortiz, Switzerland, were enlivened by a ferocious jurisdictional dispute in American hockey circles and by a charge that parties unknown had sabotaged one of the United States' bobsleds. The Summer Games in London spawned the normal quota of "international incidents," all of them inconsequential, many of them comical, all of them high-tempered.

In tennis, America's Bob Falkenburg played well enough to win the championship at Wimbledon and behaved badly enough to elicit sharp criticism from the English press. Subsequently he was ignored by the committee selecting an American team to defend the Davis Cup against Australia's challenge.

Baseball, accustomed to a hot race in one major league with a walkover in the other, found both big leagues hideously embroiled, with no fewer than four teams snarled in a frantic struggle for each pennant. Managerial heads rolled.

Even prize fighting, the last refuge of pacifism, had its moments of strife, although seldom within the ring. Fist-fight promoters and managers, who are shy, timorous creatures by instinct and occupation, were affrighted by the swift growth of television. They envisioned a day when their gladiators would contend in seclusion for the entertainment of thousands of non-paying spectators perched on bar stools. Out of this fear grew a battle over distribution of television receipts, with managers and fighters boycotting Madison Square Garden for many weeks before a compromise was effected.

It was, in short, a joyous year.

The actual competition was the liveliest and most skillful since prewar days. In the early, grisly months of indoor games, the University of Kentucky and St. Louis University established themselves as the nation's best literate basketball teams.

While the baseball season was getting under way, a colt named Citation, owned by Warren Wright's Calumet Farm and trained by Ben Jones and his son Jimmy, won the "triple crown" by galloping to victory in the Kentucky Derby, the Preakness and Belmont Stakes. Eddie Arcaro, who rode him, became the first jockey to score in four Derbies. Ben Jones, saddling his fourth Derby winner, matched the fifteen-year-old record of Derby Dick Thompson. And Citation, a bay son of Bull Lea and Hydroplane II, was accepted without serious dispute as the greatest American thoroughbred since Man o' War, if not the greatest ever. Before the season was far advanced, all three of the horses that had been contending for the money-winning championship of all time—Stymie, Armed and Assault—were out of training. Before the season ended, the possibility arose that all three might return to the track.

The season for outdoor fights arrived. Rocky Graziano, a personable roughneck with a bad war record, had met Tony Zale, the world middleweight champion, in the autumn of 1946 and been knocked out. In the summer of 1947 they had met again and Graziano had won the title by a knockout. Both fights were enchanting bloodlettings but after the second one, patrioteering boxing commissioners banned Graziano because he had been dishonorably discharged from the Army. In 1948, the New Jersey commission decided the commonwealth could survive a visit by Graziano. In the Newark ball park, Zale struck Rocky in the face and regained the championship.

Joe Louis, heavyweight champion for eleven years, had boxed poorly in December against an obscure brawler called Jersey Joe Walcott. While thousands yawned, the pair met again in Yankee Stadium. Late

in the fight, a slow and aging Louis caught up with an ancient, feeing Walcott and whacked him insensible. Louis said there would be all for him. With the announcement of his retirement, innumerable rabbits bared their fangs.

For years there had been no foreign fighters of note. But in 1948, Marcel Cerdan, an eldery, hard-bitten Frenchman from North Africa, regained his European middleweight championship from a tough awkward Belgian named Cyrille Delanno and qualified for a match with Zale, from whom Cerdan extracted the world title in eleven rounds.

In England, the venerable light-heavyweight champion, Gus Lesnevich, was beaten in a dreadful fight by a dreadful fighter, Freddy Mills.

In the Olympics, the United States murdered the competition in track and field, drowned the opposition in swimming. The best news story of the games was the tale of Harrison Dillard. The best hurdler born to date, Dillard had won eighty-two consecutive races, but he tripped in the final American Olympic trials and failed to qualify. However, he had already made the team as a sprinter, and although that wasn't his forte, he won the 100-meter race in London.

Olympic competition was good, Olympic attendance better. In broiling heat and pouring rain, English fans set box-office records, established new standards of fortitude. They had only one chance to cheer an English victory on the track. America won the 400-meter relay by a wide margin but was disqualified, and England was placed first, because a judge imagined he saw something illegal in an exchange of the baton. When movies proved him wrong and an international jury of appeal corrected the error, English fans were pleased. They hadn't relished winning by disqualification.

The Olympic games were a temporary distraction. The ball games were the real thing. In 1947, Durocher had been suspended on willowy grounds by A. J. Chandler, the unaccountably happy commissioner of baseball. With Burt Shotton as manager instead of Durocher, the Brooklyn Dodgers had won the National League pennant. But Branch Rickey, unwilling to compound an injustice, deposed Shotton and rehired Durocher for 1948.

Halfway through the season, there came the numbing announcement that Durocher had been released by the Dodgers to succeed Melvin Ott as manager of the New York Giants. Shotton returned to Brooklyn. About the same time, Johnny Neun was succeeded by his oldest and most amiable pitcher, Bucky Walters, as manager of the Cincinnati Reds, and a minor league operator named Eddie Sawyer supplanted

en Chapman as manager of the Philadelphia Phillies.

In 1947, Rickey had driven Jim Crow baseball by employing Jackie Robinson, a Negro. Bill Veeck, president of the Cleveland Indians, followed Rickey across the color line. Now, in 1948, the Indians had a full-blown Negro star named Larry Doby, an outfielder, and they also signed Satchel Paige, a gentleman of forbidding antiquity who could pitch from a rocking chair and excel most of his juniors.

Cleveland, the New York Yankees, ancient Connie Mack's Philadelphia Athletics and the Boston Red Sox, guided by a reformed Yankee manager, Joe McCarthy, sampled one another in the rush for the American League pennant while in the National League the Dodgers, Boston Braves, St. Louis Cardinals, and, at times, the Pittsburgh Pirates and the Giants contended desperately.

It was anybody's fight, and everybody attended, including many who had not previously found baseball habit-forming. A typical case was that of two ladies who, acquiring a sweet tooth for the Dodgers, attended reverently and painstakingly recorded each play on a scorecard. They learned the cabalistic symbols employed for this purpose by sportswriters, writing "6-3" when a batter grounded out to the shortstop, "K" to indicate a strikeout, and so on. One day their special favorite, Pee-wee Reese, drew an intentional base on balls. The ladies took umbrage, partly because their man was not permitted to hit a home run and partly because there was no appropriate symbol in their bright lexicon.

After a moment of frowning concentration, one lady marked her scorecard thus: "HDWH." There was acerbity in the symbol, which, naturally, stood for: "He Deliberately Walked Him!"



THE THEATER

by LOUIS KRONENBERGER

Drama Critic, *Time Magazine*

THE 1947-48 season proved quite an exceptional one—for about three months; after that it was much like any other. But thanks chiefly to such notable beginnings—to something like a dozen successes before Christmas—1947-48 proved Broadway's best season, both for quality and quantity, since before the War.

This doesn't mean Broadway experienced a real renaissance, or even a fine flaring up-burge. Not much that was unforeseeable, not much that was unforgettable, came forth. There was, to be sure, one really creative new play, Tennessee Williams' *A Streetcar Named Desire*; there was one magnificent demonstration of acting—Judith Anderson's as Medea; there was one incomparable piece of spoofing—Jerome Robbins' Mack Sennett ballet in *High Button Shoes*. But though each of these was an event, the three of them can hardly be thought to constitute an epoch; while for the rest, 1947-48 proved the best season since the '30s simply by offering the most—and the most kinds—of satisfactory evenings in the theater. There were some very nice revivals and some very nice revues; any number of excellent performances, and at least three effective plays (*Command Decision*, *Mister Roberts*, *The Heiress*) that had earlier been applauded as novels. There were visitors from England, Eire, Israel, France, not all of whom were too hos-

pitably received; there were two or three attractive experiments along with six or eight atrocious ones; and there was Richard Rodgers' and Oscar Hammerstein II's *Allegro*, which boasted perhaps the biggest advance sale—\$750,000—in the history of show business, and which some people proudly hailed and other people passionately hated. It certainly represented Rodgers' and Hammerstein's most distinguished work so far in the field of the blown-up cliché.

Of real trends, tendencies, movements, isms there wasn't—as there generally isn't—much evidence: Broadway's idea of a trend (such as introducing ballets into musical comedies) is anybody else's idea of a fad. The only trend worthy of the name was the rather widespread one of rising costs, so that it usually came to around \$50,000 to put on any show that used furniture, and around a quarter of a million to put on any that had music. There was no helping the cost with musicals, since their luxuriousness is a chief part of their lure; but it might be that straight shows were letting the tail wag the dog, the scene designer whip the playwright: apparently producers hadn't even begun to consider whether, in the case of certain brands of entertainment, a relatively bare stage would prove not a stunt but a form of salvation.

That glossy décor didn't have to be paramount or even very contributory was demonstrated right in the musical field by what turned out to be the pleasant surprise of the season—the successful re-emergence of the topical revue. Three times—first with *Angel in the Wings*, then with *Make Mine Manhattan*, finally with *Inside U. S. A.*—a revue very definitely clicked, and the chances are that the revue has now become a “trend” and will be one of 1948-49's most ubiquitous and unbearable commodities. Of the three hit revues, *Make Mine Manhattan* was both the best and the most genuinely “revueish,” since its strong point was its satirical wit. Mr. Arnold Horwitt carried off that labor of Hercules—next to which cleaning out the Augean stables is child's play—of writing more lively sketches in “Manhattan” than dull ones; and the whole show gained further from its central theme, a *sauer-süsse* celebration of Manhattan Island. *Angel in the Wings* sailed gaily past a good many hidden rocks and yawning gulfs through having the zany Hartmans at the helm. *Inside U. S. A.* was a great deal of a smash without really managing to be very much of a show; but it had Beatrice Lillie, who, even when not offered much chance to shine, is a good deal better than most things which this world offers.

On the nonmusical side, 1947-48 could claim a gratifying amount of variety and less than the usual evidence of Broadway caution. Thus *Command Decision* dared to be a reasonably serious war play; thus *The Heiress* dared to dispense with the only two endings usually tolerated on Broadway—the happy ending and the heroic one; thus *Antony and Cleopatra* bucked the handicap of being just about the most unwieldy drama ever written, and *Medea* the handicap of being just about the most unpleasant. In all four instances, success was instantaneous and, as things go on Broadway, deserved. Pointing out that war is a nasty business which just can't be made nice, *Command Decision*, if not really a play, was at least something more than a show. Once it is made clear that *The Heiress* quite blandly destroyed the whole point of the book it was taken from (Henry James' *Washington Square*) it can be praised as vivid theater. In *Medea*, Robinson Jeffers adapted Euripides' great drama about Jason's spurned and vengeful wife; and in the title role Judith Anderson, using every known trick of acting, was overwhelming. *Antony and Cleopatra* is in some ways the most wonderful thing Shakespeare ever wrote, but, with its dozens of scenes and continual leaps all over the Mediterranean world, it is a perfect tartar of a play. Guthrie McClintic's direction, however, brought it pretty clearly into focus, and Godfrey Tearle, playing Antony opposite Katharine Cornell's Cleopatra,

brought it vividly to life. Probably Broadway won't see a better *Antony and Cleopatra* till some one has the wit to produce it as it was produced in Shakespeare's day, with just a bare inner and a bare outer stage, no waits between scenes, and no attempt made to bridge its great geographical gulfs.

There remain, among the successes, what was probably the most popular new play of the season, *Mister Roberts*, and what was quite certainly the most creative, *A Streetcar Named Desire*. *Mister Roberts* followed an always remunerative course by offering slick treatment of richly human material, and was further blessed by the well-nigh perfect staging of Joshua Logan. It dramatized, or at any rate itemized, the uneventful log of a South Pacific transport far removed from the fighting, and it purported to show how much more grinding boredom can be than battle. Actually it seldom showed the characters being bored, for fear the audience might be also, but spilled over, instead, with pranksters who made much of it delightfully funny. There was also a very likable if not very interesting hero, well played by Henry Fonda. As literature, *Mister Roberts* was negligible, as a show it was often great fun.

The real distinction of *A Streetcar Named Desire* (which won both the Critics Circle and the Pulitzer awards) was that it seemed largely created where a *Mister Roberts* seemed wholly contrived. The story of a Southern nymphomaniac in a steep downhill fight from reality, *Streetcar* shows mixed levels of talent and recurring lapses of taste; but it has about it some of the pathos and intensity of life as well as much of the luridness of sheer theater, and as acted by Jessica Tandy and Marlon Brando and directed by Elia Kazan, it left a real and powerful effect.

Among the failures of 1947-48, the Experimental Theater was perhaps the most newsworthy. It went into its second season with one of the most feckless records behind it imaginable; and in saying it did better in 1947-48, the inference is intended that it was hardly in a position to do worse. At the very start, with Bertolt Brecht's *Galileo*, and at the very end, with an evening of three ballets, it justified its existence. Otherwise it offered dullness and drivel, sometimes separately, oftener together. But elsewhere during the season an experimental group called New Stage kicked up its heels with Jean-Paul Sartre's angry piece of sensationalism, *The Respectful Prostitute*. The play, if hardly a convincing exposé of what's wrong with the South, was a lively and now and then caustic melodrama. It created so much of a stir that it moved to Broadway where (judge by one presumably typical audience) it prospered for all the worst reasons.

The New York Theatrical Season

FROM OTHER SEASONS

Play	Date opened	Per- form- ances
Harvey	Nov. 1, 1944	1687*
Learn Yesterday	Feb. 4, 1946	1154*
ennie Get Your Gun (M)	May 16, 1946	1027*
High Button Shoes (MR)	Oct. 9, 1947	445*

1947-1948

his Time Tomorrow	Nov. 3, 1947	32
ial Honeymoon	Nov. 3, 1947	8
r Love or Money	Nov. 4, 1947	263
he First Mrs. Frazer (R)	Nov. 5, 1947	53
astward in Eden	Nov. 18, 1947	15
Anthony and Cleopatra (R)	Nov. 26, 1947	126
Streetcar Named Desire	Dec. 3, 1947	383*
ribbean Carnival (MR)	Dec. 5, 1947	11
he Gentleman from Athens	Dec. 9, 1947	7
ngel in the Wings (MR)	Dec. 11, 1947	308
ime and Punishment (R)	Dec. 22, 1947	64
he Cradle will Rock (M)	Dec. 26, 1947	39
opaze (R)	Dec. 27, 1947	1
harvest of Years	Jan. 12, 1948	16
ower without Glory	Jan. 13, 1948	31
Strange Bedfellows	Jan. 14, 1948	229
ake Mine Manhattan (MR)	Jan. 15, 1948	343*
he Men We Marry	Jan. 16, 1948	3
he Survivors	Jan. 19, 1948	8
he Last Dance	Jan. 27, 1948	7
ook, Ma, I'm Dancin'! (M)	Jan. 29, 1948	188
athleen	Feb. 3, 1948	2
ector Social	Feb. 11, 1948	5
ister Roberts	Feb. 18, 1948	293*
night at 8:30 (R)	Feb. 20, 1948	26
ne and Molly	Feb. 26, 1948	158
he Linden Tree	Mar. 2, 1948	7
he Hallams	Mar. 4, 1948	12
ou Never Can Tell (R)	Mar. 16, 1948	39
y to the World	Mar. 18, 1948	124
acbeth (R)	Mar. 31, 1948	39
he Rats of Norway	Apr. 15, 1948	4
he Cup of Trembling	Apr. 20, 1948	23
he Play's the Thing (R)	Apr. 28, 1948	186*
inside U.S.A. (MR)	Apr. 30, 1948	211*
old It (M)	May 5, 1948	46
ally (R)	May 6, 1948	36
ope's the Thing	May 11, 1948	7
he Vigil	May 21, 1948	12
eds in the Wind	May 25, 1948	7
eeepy Hollow (M)	June 3, 1948	12

OPENINGS—SEPT. 1 TO OCT. 31, 1948

undown Beach	Sept. 7, 1948	7
howboat (R)	Sept. 7, 1948	16
ilarities (MR)	Sept. 9, 1948	14
mall Wonder (MR)	Sept. 15, 1948	53*
eaven on Earth (M)	Sept. 16, 1948	12
Magdalena (M)	Sept. 20, 1948	48*
Story for Strangers	Sept. 21, 1948	7
randma's Diary	Sept. 22, 1948	5
own House	Sept. 23, 1948	11
ime for Elizabeth	Sept. 27, 1948	8
Edward, My Son	Sept. 30, 1948	43*
ivate Lives (R)	Oct. 4, 1948	32*
ummer and Smoke	Oct. 6, 1948	29*
ove Life (M)	Oct. 7, 1948	28*
Where's Charley? (M)	Oct. 11, 1948	24*
he Leading Lady	Oct. 18, 1948	8
ly Romance (M)	Oct. 19, 1948	15*
ife with Mother	Oct. 20, 1948	12*
he Voice of Israel	Oct. 25, 1948	8*
Tinnie and Mr. Williams	Oct. 27, 1948	5*

PLAYS OPENING IN FORMER SEASONS THAT CLOSED IN 1947-48

klahoma! (M)	Mar. 31, 1943	2022
he Voice of the Turtle	Dec. 5, 1943	1558
all Me Mister (MR)	Apr. 18, 1946	734
appy Birthday	Oct. 31, 1946	563
urlesque (R)	Dec. 25, 1946	437
inian's Rainbow (M)	Jan. 10, 1947	723
Il My Sons	Jan. 29, 1947	328
ohn Loves Mary	Feb. 5, 1947	423
rigadono (M)	Mar. 13, 1947	580
Young Man's Fancy	Apr. 29, 1947	335
he Medium and The Telephone (M)	May 1, 1947	211

THE NEW YORK CITY THEATER COMPANY

Play	Date opened	Per- form- ances
Volpone (R)	Jan. 8, 1948	14
Angel Street (R)	Jan. 22, 1948	14
Four One-Act Comedies by Anton Chekhov (R)	Feb. 5, 1948	14
The Alchemist (R)	May 6, 1948	14
S.S. Glencairn (R)	May 20, 1948	14
The Insect Comedy (R)	June 3, 1948	14

THE AMERICAN REPERTORY THEATER

Ghosts (R)	Feb. 16, 1948	10
Hedda Gabler (R)	Feb. 24, 1948	15

THE AMERICAN NEGRO THEATER

Rain	Dec. 26, 1947	40
The Washington Years	Mar. 12, 1948	13
Sojourner Truth	Apr. 20, 1948	26
Almost Faithful	June 2, 1948	27

THE HABIMAH PLAYERS

The Dybbuk	May 1, 1948	16
David's Crown	May 8, 1948	8
The Golem	May 15, 1948	16
Oedipus Rex	May 22, 1948	8

THE DUBLIN GATE THEATER COMPANY

John Bull's Other Island (R)	Feb. 10, 1948	8
The Old Lady Says No!	Feb. 17, 1948	8
Where Stars Walk	Feb. 24, 1948	8

THE D'OYLY CARTE OPERA COMPANY

The Mikado	Dec. 29, 1947	40
Trial by Jury and Pirates of Penzance	Jan. 5, 1948	16
Iolanthe	Jan. 12, 1948	16
Cox and Box and H.M.S. Pin-afore	Jan. 19, 1948	16
The Gondoliers	Jan. 26, 1948	16
The Yeomen of the Guard	Feb. 2, 1948	16
Patience	Feb. 9, 1948	16

THE EXPERIMENTAL THEATER

Galileo	Dec. 7, 1947	6
Skipper Next to God	Jan. 4, 1948	94
A Long Way from Home	Feb. 8, 1948	6
A Temporary Island	Mar. 14, 1948	6
The Six O'Clock Theater's: Hope Is the Thing with Feathers		
Celebration	Apr. 11, 1948	6
Afternoon Storm		
Ballet Ballads (M)	May 9, 1948	71

NEW STAGES, INC.

Lamp at Midnight	Dec. 21, 1947	51
The Respectful Prostitute	Feb. 9, 1948	302*
To Tell You the Truth	Apr. 18, 1948	15

THE ASSOCIATED PLAYWRIGHTS

The Golden Falcon	Mar. 25, 1948	8
g-11	May 27, 1948	8

Our Lan'	Sept. 27, 1947	41
The Heiress	Sept. 29, 1947	410
How I Wonder	Sept. 30, 1947	63
Command Decision	Oct. 1, 1947	409
Music in My Heart (M)	Oct. 2, 1947	124
Man and Superman (R)	Oct. 8, 1947	295
Allegro (M)	Oct. 10, 1947	315
Medea	Oct. 20, 1947	214
An Inspector Calls	Oct. 21, 1947	95
The Druid Circle	Oct. 22, 1947	69
The Winslow Boy	Oct. 29, 1947	218

*Still running as of Oct. 31, 1948. (M)—Musical; (MR)—Musical Revue; (R)—Revival.

FICTION

by JOHN CHAMBERLAIN

Senior Writer, Life Magazine

THERE WERE NOT many signs of positive health in the new American fiction of 1948. Negatively, however, there were indications that we were about to do better. Having worked practically every possible variation on the "lost week end" theme, our authors suddenly stopped exploiting the strange manifestations of alcoholism. In 1947 and before, the insane asylum was a favorite hunting ground of the novelist. Not so in 1948, which, by negative implication, returned a vote for some measure of sweet reasonableness.

The lack of preoccupation with the extremities of human agony might be ascribed to the fact that peace of a sort had returned to the world. From the standpoint of fictional drama, this peace was regrettably close to apathy. There were trends in 1948, but nobody pursued any special trend with whoops and hollers of enthusiasm. Truman Capote, a young short story writer who has considerable talent, added a bizarre note to the confused adolescent theme in his *Other Voices, Other Rooms*. But no phalanx of young artists followed in Truman Capote's train to proclaim the virtues of Capoteism. In his gigantic *Raintree County*, Ross Lockridge carried to its ultimate conclusion the "total recall" type of novel beloved of Thomas Wolfe. But no school of Lockridgeans materialized—and Mr. Lockridge's own suicide, which followed hard upon his achievement of best-sellerdom, was in a sense a symbolic act.

The best novel of 1948 was Norman Mailer's *The Naked and the Dead*, which did much to allay the publishers' fears that people could not be made to read about the late war. The story of a single platoon's experience in a jungle campaign to mop up the disagreeable island of Anopopei in the South Pacific, *The Naked and the Dead* had its obvious affinity to John Dos Passos' World War I *Three Soldiers*. In the war fiction of 1947, there was a measure of gallantry, of humor, of pity and sensitive preoccupation with human values. James A. Michener's *Tales of the South Pacific*, the 1947 Pulitzer Prize winner, was frankly romantic in some of its episodes; Thomas Heggen's *Mister Roberts* might have been written by a latter-day Conrad or Kipling insofar as its delight in the gentleman's code of chivalrous courage was concerned. And John Horne Burns' 1947 *The Gallery*, which dealt with the American occupation of Naples, was a warm book. Compared with Mr. Mailer's 1948 best-selling *The Naked and the Dead* these war stories of

1947 seem like sentimental tosh. For with Mr. Mailer, gallantry is virtually nonexistent. There are two characters in the Mailer story who act from humane motives, but Mr. Mailer makes it rather pointed that the Brooklyn mechanic, Goldstein, is the end product of an old tradition of suffering and Talmudic religion, while his southern sharecropper, Ridges, retains a vestige of his Biblical upbringing. As for the rest of the characters in *The Naked and the Dead*, they maintain a dreary fidelity to the sultry human behavior patterns which they have picked up as kids in South Boston or Chicago, in Montana mining towns or on the Texas cattle ranges. They are tougher than any characters in Hemingway, and their sex practices (as revealed in marriage back-flashes) are straight out of the Kinsmen report.

The most depressing thing about *The Naked and the Dead*, however, is not the apathy of Mr. Mailer's Red Valsen from Montana or Gallagher from South Boston. The really disillusioning element in the novel is the author's implied conclusion that even our military successes in World War II were the result of certain horrifying traits of character. Sergeant Croft's immense efficiency derived from a sort of gunman's delight in murder; General Cummings' passion for high strategy on Anopopei reflected his coldness toward human beings, his sexual maladjustments, his early hatred for his father. And the platoon whose fortunes are so bitterly related by Mr. Mailer kept to its mission behind the Japanese lines solely out of fear of the officers. The officers themselves—Lieutenant Hearn and Sergeant Croft—are engaged in a pathological contest for dominance, not in any real crusade to win a better world.

This is disillusion with a vengeance. After World War I, our Hemingways and Dos Passoses set out on careers of idol-smashing with a zestful animal vitality. Sinclair Lewis kidded Babbitt out of feelings of affection as well as of derision; Dreiser maintained an air of brooding pity even in his most inexorable realism. But Norman Mailer breaks images without getting a anarchic fun out of it. That is the ultimate commentary on our times.

The exposure of Big Business has long been a preoccupation with American fiction writers. In 1948 the novelists got around to exposing the business of Big Publishing. Life on a famous news weekly was portrayed in unglamorous accents and without charity in Merle Miller's *That Winter a*

Ralph Ingersoll's *The Great Ones*; a publishing family got it in the neck in Robert Van Gelder's *Important People*. While the fiction of literary exposure undoubtedly added to the spice of life in 1948, it also gave rise to Mrs. Isabel Paterson's immortal crack about there being a school of cannibal novelists who live by eating up their friends and ex-friends.

Along with the literature of disillusion and exposure went the literature of historical romance. Hollister Noble's *Woman with a Sword* was one of 1948's better historical novels. Based on a good deal of exhaustive historical research into the Civil War career of Ann Carroll, a Maryland woman who is said to have evolved the strategy used by Grant and Sherman to cut through the Confederacy west of the Appalachian Mountains and roll up General Lee's flanks from the south, *Woman with a Sword* received the compliments of historians who said it might have been even better as pure biography. Thornton Wilder's *The Ides of March*, a novel based on letters written in the time of Caesar, was, perhaps, the most finished literary performance of 1948. But readers found its perfection a little cold. For better or worse, they seemed to prefer the more conventional cloak-and-sword historical romance, complete with the bosomy beauty in furbelowed costume on the jacket.

Just as the second year is the hazardous surmise in the life of a major league ball player so is the second novel the challenge which frequently defeats the young novelist who has achieved fame with a maiden effort. Miss Betty Smith, who captured both the heart and the pocketbook of a nation some years ago with her *A Tree Grows in Brooklyn*, finally came up with

her second novel last year. Called *Tomorrow Will Be Better*, the new Smith story could not compete for acclaim with its predecessor. Although it was just as expertly written, it lacked the high-hearted appeal of *A Tree*. Nevertheless, *Tomorrow Will Be Better* brought no disgrace to its author, for it demonstrated anew the facts of her compassionate regard for human beings and her literary skill. She will continue to write, and, just as F. Scott Fitzgerald survived a minor second novel, *The Beautiful and the Damned*, to write his third (and best) work in *The Great Gatsby*, so will Betty Smith live to surpass her second performance.

The publishers found 1948 a bitter anticlimax to the years of high wartime dollar volume and high dollar profit per volume. Kinsey's *Sexual Behavior in the Human Male* made money for the bookstores, but there were no comparable list-leaders in fiction. Joseph A. Margolies, the Vice President of Brentano's, Inc., has been quoted by Harry Hansen as saying: "Of course, what we need is an unusually good novel, or several. That starts the buying. When you think of the great books of 20 and 30 years ago, with Wells, Conrad, Galsworthy; the plays of Shaw; the translations from the Russians, including Dostoevski and Tolstoi, and dozens of new American writers, you see what we lack now."

When young writers like Norman Mailer rediscover people as human beings, not mechanized clods or coldly efficient machines, we will get the novel—or novels—desired by Mr. Margolies.

But first we must have the revolution in attitude which seemed closer to us in the books of 1947 than it did in the books of 1948.



THE SCREEN

by KYLE CRICHTON

Movie Critic, Collier's Magazine

BY MID-SUMMER of 1948, Hollywood couldn't have been more shell-shocked. Howard Hughes had flown up Vine Street and dropped Sir Stafford Cripps and a bomb load on the Brown Derby. Indeed, little more in the way of terror was required of Mr. Hughes since he had recently purchased RKO, cut the personnel from twenty-five hundred to six hundred and provided a spectacle of decimation as complete as anything since the days of Attila the Scourge.

This is a light way of treating a situation that was tragic for thousands of Hollywood

workers and increasingly serious for the industry. The first blow had come in 1947 when the British had imposed a 75-percent tax on all imported films and Hollywood had retaliated by refusing to send films at all. A new arrangement was worked out early in 1948 that was accepted but not too heartily welcomed by Hollywood. The peaceful interlude was broken after several months by a new edict that 45 percent of all first-run playing time in English theaters must be reserved for British films.

But most frightening of all was the news that domestic grosses had fallen off from

20 to 30 percent. Having in essence lost the entire foreign market, this last blow was disastrous. The firings that had begun in 1947 were now speeded up and bad tidings became routine. It was serious when an expensive picture like *I Remember Mama* came limping through the countryside but when audiences turned a pallid eye to *The Emperor Waltz*, in which appeared Bing Crosby, the great panjandrum himself, there was cause for panic.

Obviously what was needed were better pictures and pictures produced at a more reasonable cost. This was easier said than done. Wages were high at the studios, and the unions were firmly entrenched; the cost of materials was staggering, and overhead expenses were fabulous. What was plainly called for was a palace revolt. Studio heads, producers and the general hierarchy of the dynasty were becoming old and undeniably mildewed. At a time when strong, hard-hitting pictures were desperately needed, they had allowed themselves to be pushed around by the Thomas Un-American Activities Committee. The "Unfriendly Ten" had been held for contempt of Congress and had been fired by Hollywood. This brought on a state of indecision and jitteriness bordering on collapse. A great scurrying about for "escape" films brought a series of epics from which the only escape was provided by the audiences.

The one hopeful note was Dore Schary's appointment as production head of MGM. After a short career at RKO that had established him as the new white-haired boy of the industry, Schary had been unable to work with Howard Hughes and was now at a studio that had been steadily going downhill under a policy that substituted slickness and lavishness for brains. They had almost ruined their great property, Clark Gable, with such as *Adventure* and *The Hucksters*, but now had *The Homecoming*, which was belabored mightily by the critics but pleased the paying patrons.

It would require two years for Schary's work to show results and in the meantime the MGM policy of smooth and gold was keeping them afloat. Their money success of the year was *Easter Parade*, a musical film based on Irving Berlin's tunes, in which Fred Astaire returned to the wars and teamed with Judy Garland. *State of the Union*, with Spencer Tracy and Katharine Hepburn was good, and *The Search*, made in Switzerland and occupied Germany by Fred Zinneman, was outstanding. The rest was slick, soppy and second-rate.

Universal experienced financial difficulties and closed down for the summer after a period of great attempts, blundering experiments and two successes, *The Naked City*, a rousing semi-documentary by the late Mark Hellinger, and *The Egg and I*. Two fine but financially unfortunate ven-

tures were *All My Sons* and *Another Part of the Forest*, adapted from stage successes and apparently too rich for the popular taste. *The Senator Was Indiscreet* was dismal failure.

An even greater disaster was Enterprise's *Arch of Triumph* with Ingrid Bergman as Charles Boyer, which cost \$4,000,000 and would lose half of it. This was ruined much by the purity laws that emasculated the script as by the pretentiousness of the finished film. Enterprise recouped somewhat with *Body and Soul*, the prize-winning drama distinguished by the extraordinary fight shots of James Wong Howe, the cameraman.

The great success of the year was *Sittin' Pretty*, Clifton Webb's hilarious film, 20th Century-Fox. It set everybody running about for humorous themes and Paramount came up with Brackett and Wilder's *A Foreign Affair*, which was found amusing by all except those who objected to ruining Germany and the black market as comic subjects. The Zanuck forces at 20th Century-Fox hurried their new dramatic sensation, Richard Widmark, into *Street with No Name*, and it was noted that the new stars were all male, with Burt Lancaster and Montgomery Clift also agitating the savage female breasts.

Warner's did one good film in *The Treasure of Sierra Madre* and a remarkable one with Jane Wyman playing the deaf and mute girl in *Johnny Belinda*, but *Life with Father* was merely dull and Bette Davis took another step toward artistic oblivion with *Winter Meeting*. Columbia produced *The Fuller Brush Man*, with Red Skelton that irked some critics but convulsed movie spectators. Samuel Goldwyn had a nothing in *The Bishop's Wife* and a popular one in *A Song Is Born*, which used most of the jazz talent of the nation. He also had a new romantic team started in Catherine O'Donnell and Farley Granger, who did an excellent RKO picture in *The Twisted Road*, but the idyll blew up in a Goldwyn O'Donnell row that severed the connection.

The English produced the great picture of the year in Laurence Olivier's *Hamlet* and there was real quality in David Lean's *Oliver Twist*, but the quality of English films was falling off generally. There was a strong support for Carl Dreyer's *Day of Wrath*, a Danish classic, and the Italians had another triumph with Roberto Rossellini's *Paisan*. French production fell to a whisper (the French blamed it on a Blum-Byrnes agreement) but the old one continued to come over and some of the new were fine—Pagnol's *Fanny* and Marcel Pagnol's *Volpone*, *Jenny Lamour*, *Farrebique*, *Paris Not Guilty* and *The Idiot*, a masterpiece based on the Dostoevsky novel and almost overlooked by the critics.

During the fall months Eric Johns

as courting about Europe making deals behind the Iron Curtain for the distribution of American pictures and having success with such people as Stalin and Tito, but as against that there was the demand of J. Arthur Rank in London that English pictures get a better break in the American market. This could lead to an intensification of the Anglo-American feud and was another source of worry for the industry. There was the further threat in the government suit to force the separation of production activities and theater ownership, which could possibly mean the dissolution of some companies to cling to their theaters and dump their studio production. Who would make the pictures after that, as the problem, and the status of independent producers had been almost ruined by reluctance of the banks to continue

their support of such projects. The theory that high-priced stars might now take less money for their services was balanced by the fact that without established names pictures didn't draw at all. In short, star prices were not dropping.

It was a bad year and it ended on the most harrowing note of all—television. Nobody knew what the effect would be on motion pictures but everybody trembled at the thought. It was decided to operate on the if-you-can't-lick-them-join-them basis and there was action among the movie companies to get television stations of their own, make short films for television and arrange newsreel tie-ups with television. Whatever happened couldn't be much worse than what had already happened. It was definitely the year of discontent in Hollywood.



MUSIC

by IRVING KOLODIN

Music Critic, *New York Sun*; Editor, *Saturday Review of Recordings*

THE CONCERT SEASON

LARGELY SPEAKING, 1948 was a prosperous year for music in the United States. Activity continued at a high level. The public spent considerable money on concerts and opera, and record makers prospered—at least until the seasonal diversion of interest during the summer. Yet there were indications that the rising costs of producing music were approaching a point where they would pass both the income from box-office receipts and the guarantee funds. The annual series of concerts in Philadelphia's Robin Hood Dell was suspended when but half completed, the Ballet Theatre decided to forego touring until 1949, and even the Metropolitan Opera Company announced cancellation of its season until the unions agreed to accept the wages that had prevailed previously. The Philadelphia Orchestra similarly threatened cancellation, but opened its season when agreement was reached over a wage raise.

Despite these and other difficulties incident to the times, the major orchestras continued to evolve plans for a long-term future. In Boston, the imminent retirement of Serge Koussevitzky from a post he had held for a quarter of a century was coordinated with the engagement of the Alsatian Charles Muench as Koussevitzky's successor. It was indicated that Koussevitzky's retirement would be no passive one for he will continue to direct the Berkshire Festival at Tanglewood and will

doubtless be available for ceremonial guest appearance in Boston.

As remarkable for its brevity of tenure as was Koussevitzky's for its length was the dismissal of Artur Rodzinski midway in his first season as director of the Chicago Symphony Orchestra. The high-strung Rodzinski's intention to make Chicago the "musical capital of the country" was endorsed in principle by his employers, but some budgetary excesses, plus a notable independence in his conduct of the orchestra's affairs, speedily cooled the initial cordiality. Though irate subscribers picketed the hall, pro-Rodzinski editorials dotted the press, and the City Council voted a testimonial to the conductor's success in revitalizing the orchestra, Chicago is now having a season of guest conductors—minus Rodzinski.

Monetary problems, plus the end of a ten-year tenure by Fritz Reiner, have resulted in a similarly unsettled situation in Pittsburgh. New faces are evident there also, the youngest and newest being Leonard Bernstein's. He was assigned direction of a lengthy tour, as well as a sizable segment of the local season. Elsewhere, Efrem Kurtz moved south from Kansas City to Houston, and rumors that Eugene Ormandy might leave Philadelphia (Chicago was a likely destination) were prevalent.

The second phase of James C. Petrillo's battle with technology continued, with the record makers again his adversaries. Roy-

alty payments to the union having been outlawed by the Taft-Hartley Act, he forbade further record making after January 1, 1948. However, his desire for smoother public relations was reflected in speedy renewal of network radio contracts when they expired in March, with dispensations favorable to FM radio and television. He was present in the NBC studio on March 20, when Arturo Toscanini was seen as well as heard by an audience scattered over the Eastern seaboard. This was the formal premiere of live music on television, though chronology was favorable to Eugene Ormandy, whose afternoon broadcast of the same day from Philadelphia was televised by cameras hastily assembled in the Academy of Music.

New talent from Europe was hardly as plentiful as had been expected, but quality was evident if quantity was not. Marked for future attention were Samson François, a French pianist in his twenties who affected a wispy mustache and a shaggy head of hair; the even younger Palestinian pianist Menahem Pressler; a teen-aged prodigy from Hungary named Ervin Laszlo; the mature English contralto Kathleen Ferrier; her compatriot Clifford Curzon, who gave a brilliant piano recital in Town Hall, New York; and Ginette Neveu, who played the Brahms *Violin Concerto* impressively in New York and Boston to belie her French origin. Among those scheduled to appear early in the new season were Aksel Schiøtz, Danish tenor, Francis Poulenc, French composer, and Italo Tajo, celebrated Italian basso.

Curzon and Neveu had both visited this country prewar with indifferent success, linking them with such other returners as Harriet Cohen and Benno Moisevitich, pianists, and the baritone-tenor Louis Graveure. Considerable wordage was expended on Ferruccio Burco, an eight-year-old "conductor" who had an orchestra of Philharmonic men for his Carnegie Hall debut. His talent is unmistakable, but he did little more than accompany the smooth-functioning ensemble.

The customary budget of new music from the symphony orchestras and soloists was swelled by the work of the Little Orchestral Society, whose in-between size resulted in performance of much music rarely heard in New York. David Diamond and Douglas Moore were among the American composers favored by its director Thomas L. Scherman, and a recording company was sufficiently impressed by Diamond's *Romeo and Juliet* suite to make it available commercially. Moore's *Farm Journal* was followed later in the season by the Philharmonic's playing of his *Second Symphony*. Along with Malipiero's *Fourth Symphony*, Martinu's *Third*, and the unnumbered *Serena* of Hindemith, this was one of the

notable new symphonies heard during the winter. An oddity in this field was the appearance of two unfamiliar symphonies by such established composers as Mahler and Rachmaninoff—the *Sixth* and *First* respectively. Despite the fervent work of Mitropoulos and Ormandy, good reason for neglect was evident in both instances. On the other hand, it seemed odd that so compelling an invention as Honegger's *Joan of Arc the Stake* should have waited ten years for an American hearing, when Muench offered it to a Philharmonic audience, with Vera Zorina speaking the lines of the Maid.

Rehearings validated the original opinions of such older "novelties" as the *Third Symphony* of Aaron Copland, Samuel Barber's *Cello Concerto*, and the pre-World War-I *Three Places in New England* by the septuagenarian Charles Ives. Ives' work followed in sequence the award to him of the Pulitzer Prize in music and the recording of his "*Concord*" *Sonata*—hardly compensation for a lifetime of neglect. Martinu's *Madrigals* and a quartet by Ross Lee Finney were the best of a slim selection in new chamber music.

As a focal point for musical experience throughout the country, New York again provided some remarkable broadcasts. Toscanini-directed versions of Verdi's *Otello* and Beethoven's *Ninth Symphony* and performances by Bruno Walter and the Philharmonic of Mahler's *Lied von der Erde* and Beethoven's *Missa Solemnis*. The glory of pure sound has rarely been more evident than in a benefit performance of Verdi's *Requiem*, directed by Toscanini before a houseful of listeners in Carnegie Hall. They paid a total of \$50,000 to the building fund of the New York Infirmary.

Such star performers as Rubinstein and Horowitz, Serkin and Casadesu, Francescatti, Elman, Landowska, De Luca and Maggie Teyte illuminated the concert season. Two other names made news for divergent reasons: Richard Tauber disappeared suddenly in London early in January, and Jascha Heifetz was absent on a self-willed sabbatical from concert-giving. Some interpreted Heifetz's departure as, in part, a kind of journey to Canossa, for, after a series of indifferent recordings in America, he spent considerable time in London working for the microphone with Sir Thomas Beecham.

There were prize-winners by the dozen including Marilyn Cotlow and Francisco Guerra, who won Metropolitan Opera contracts in the yearly "Auditions"; and Seymour Lipkin, of Cleveland, who was chosen for the first award of the Rachmaninoff Fund. This assured him a recording contract and guest engagements with prominent symphony orchestras. A worthy haul—if meager by comparison with the profit of "Stop the Music."

Record of Major Orchestras, 1948

Source: Questionnaires to orchestras.

Orchestra	Permanent conductors	No. of musicians	No. of concerts*	Estimated total attendance	Home auditorium	Seating capacity
Baltimore Symphony Orchestra	Reginald Stewart	85	40(h) 28(r)	150,000	Lyric Theatre	2,651
Boston Symphony Orchestra	Serge Koussevitzky	110	66(h) 45(r)	700,000	Symphony Hall	2,600
Buffalo Philharmonic Orchestra	William Steinberg	82	50(h) 3(r)	122,500	Kleinhans Music Hall	2,939
Chicago Symphony Orchestra	(None at present)	100	98(h) 27(r)	315,000	Orchestra Hall	2,582
Cincinnati Symphony Orchestra	Thor Johnson	85	51(h) 67(r)	308,000	Cincinnati Music Hall	3,460
Cleveland Orchestra	George Szell	96	96(h) 34(r)	278,400	Severance Hall	1,836
Dallas Symphony Orchestra	Antal Dorati	83	34(h) 52(r)	250,200	State Fair Auditorium	4,300
Denver Symphony Orchestra	Saul Caston	80	50(h) 15(r)	109,400	Municipal Auditorium	3,200
Detroit Symphony Orchestra	Karl Krueger	100	101(h) 45(r)	950,000	Music Hall	2,000
Houston Symphony Orchestra	Efrem Kurtz	85	35(h) 5(r)	160,000	City Auditorium	3,900
Indianapolis Symphony Orchestra	Fabien Sevitzky	85	39(h) 35(r)	152,000	Murat Theatre	2,000
Kansas City Philharmonic Orchestra	Hans Schwieger	77	43(h) 12(r)	125,000	Music Hall	2,572
Los Angeles Philharmonic Orchestra	Alfred Wallenstein	88	46(h) 45(r)	228,000	Philharmonic Auditorium	2,666
Minneapolis Symphony Orchestra	Dimitri Mitropoulos	90	34(h) 70(r)	280,000	Northrop Mem. Auditorium	4,841
National Symphony Orchestra (Wash., D.C.)	Hans Kindler	85	100(h) 50(r)	.....	Constitution Hall	3,844
New Orleans Symphony Orchestra	Massimo Freccia	75	37(h) 8(r)	121,500	Municipal Auditorium	2,700
New York City Symphony	(No 1948 fall season)	..	.....	.....	.....	.....
New York, Philharmonic-Symphony Society of	Bruno Walter†	107	109(h) 3(r)	283,767	Carnegie Hall	2,736
Oklahoma Symphony Orchestra	Victor Alessandaro	90	38(h) 10(r)	101,100	Municipal Auditorium	6,000
Philadelphia Orchestra	Eugene Ormandy	110	79(h) 67(r)	449,026	Academy of Music	2,980
Pittsburgh Symphony Orchestra	Vladimir Bakaleinikoff†	86	55(h) 30(r)	145,000	Syria Mosque	3,729
Rochester Philharmonic	Erich Leinsdorf	80	36(h) 36(r)	85,968	Eastman Theatre	3,352
St. Louis Symphony Orchestra	Vladimir Golschmann	85	70(h) 27(r)	250,000	Opera House—Kiel Audit.	3,500
San Antonio Symphony	Max Reiter	80	26(h) 25(r)	140,000	Municipal Auditorium	6,015
San Francisco Symphony Orchestra	Pierre Monteux	100	83(h) 9(r)	270,000	War Memorial Opera House	3,252

* (h)—at home; (r)—on road. †Musical adviser.

OPERA

A HISTORY full of anomalies reached the most perplexing of them in the summer of 1948 when the Metropolitan Opera reported to its public that it was in no condition to carry on its work, despite unprecedented box-office response during the previous year. The threat to suspend operations came when discussions with several unions failed to yield a basis of agreement by August 1. Shortly before, a loss of \$220,000 on the previous season had been publicized, and the threat of exceeding this by granting the advantages desired by the unions led to a virtual ultimatum. A settlement was finally reached for a curtailed season, with a statement from all the unions that a review of the entire Metropolitan situation was desirable.

The actual operating deficit was \$170,000, for the remaining \$50,000 is a sum annually earmarked for depreciation, mortgage retirement, etc. Of this amount, a considerable portion was spent, above budget calculation, on several of the projects that made the 1947-48 season of the Metropolitan more interesting than several of its immediate predecessors. New settings for Wagner's *Ring Cycle*, though underwritten by the Opera Guild to the amount of \$100,000, cost substantially more than that to complete, and, together with the production of Benjamin Britten's *Peter Grimes*, resulted in a \$62,000 uncalculated expenditure in construction costs and rehearsals. Capacity audiences prevailed, with few exceptions, wherever the company played in its seven-week tour, but a railroad accident enroute to Atlanta added thousands in transfer charges to that journey, and the two-week stay in Los Angeles required scenery for half a dozen works not given elsewhere on the tour.

The most perplexing phase of the anomaly was that the rise in living costs which impelled the unions to ask for higher wages and social security benefits also inhibited the management from looking for greater revenue by increasing the cost of tickets. Admissions had remained fixed during all the years of the war, and it was feared that any increase theoretically geared to increased costs or production would result, merely, in fewer patrons and, finally, in a smaller income. The logical solution was a house with many more cheap seats and a stage equipped with the urgently needed facilities for economic operation, but such advantages seemed far in the future as the new season began.

The bitter truth of the Metropolitan's position was that a loss in six figures would, for most opera fanciers, be more tolerable if the average of the Metropolitan's performances were artistically higher. There was a scattering of notable occasions, such as the Saturday afternoon

Tristan and Isolde with Melchior and Traubel, an occasional *Don Giovanni*, the year-end *Rigoletto* with Pons, Bjoerling and Warren, and the "Ring" performance of *Siegfried*, and the *Il Trovatore* in which Cloe Elmo made her debut. These were occasions when casts and conductors were wholly qualified for their work and the results were what might reasonably be expected of the country's only permanent opera company. But the day-to-day performances of *Carmen*, *Aida*, *La Traviata* and *Tannhäuser* were erratic in the extreme, with the same group of singers rarely maintained from one performance to the next.

A portent of the season to come was provided in the opening performance of Verdi's *A Masked Ball*, solemnized by photographers of *Life* magazine and the tabloids who snapped some of the overdressed elite in singularly vulgar poses. Illnesses had decimated the cast planned by the management, and the commonplace singers could hardly compete, for news space, with the report of a dowager's leg on a table at Sherry's. What followed was often better for the elementary reason that it could hardly be worse.

The uniform success of Britten's *Peter Grimes* in a dozen European centers, well as in Tanglewood the year before, went to a degree—repeated at the Metropolitan. A prosaic stage production and the large auditorium reduced somewhat the effect of Britten's writing, but its theatrical essence remained intact. Frederick Jagner (Peter), Regina Resnick (Ellen) and John Brownlee (Captain Balstrade) were probably a wise choice for the uncertainties of a premiere, but their more youthful alternates (Brian Sullivan, Polyna Stoska and Mack Harrell) were a good deal more believable when given their opportunities.

Miss Stoska, like Sullivan, was known for her work on Broadway in Kurt Weill's *Street Scene*. Previously she had sung widely on the Continent and proved capable of reliable service in *Tannhäuser*, *Don Giovanni* (Elvira), *Die Meistersinger* and the *Ring Cycle* (Freia and Gutrun). With reasonable opportunity for development she might match the progress of Eleanor Steber, whose Pamina in Mozart's *The Magic Flute* is now as much worth hearing as anything the company has to offer. Miss Steber's major new venture of the season was the title role in *Manon*, but it is not yet her part. A similar statement would in order for Dorothy Kirsten's *Louise* whose predecessors at the Metropolitan have been such luminaries as Farrar, Brown and Grace Moore. In the same opera, John Brownlee shamed his younger colleague with the skill of his acting, the artist with which he used a fading voice to depict the Father.

Virtually the only new artist of "Metropolitan" caliber was Cloe Elmo, a small person of great dramatic force and fine vocal equipment who sang Azucena in *Il Trovatore* and Ulrica in *A Masked Ball* with fire and feeling that almost inflamed the Metropolitan's dusty scenery. Her vocal range was overtaxed by Santuzza in *Cavalleria Rusticana*, though it may be said, in extenuation, that she went to the hospital shortly afterwards, a victim of appendicitis. Other newcomers assigned leading roles were Ellen Dosa (a mediocre Tosca), Erna Schleutter (whose Isolde was vocally weary and temperamentally drab), and Pla Tassinari, wife of the favored Ferruccio Tagliavini. Tassinari is past her vocal prime, but she utilized her experience productively in *Tosca* and *La Bohème*. Late in the season a raw but gifted Italian tenor named Giuseppe di Stefano won bravos for his singing in *Rigoletto* and *Manon*.

What the respected Lee Simonson might do with the scenic problems of Wagner's *Ring Cycle* was much anticipated, but the limitations of the Metropolitan's stage, which had baffled many another designer, embarrassed him too. Trammelled by tradition and the inflexible demands of the music, Simonson was represented by a melange of old and new that was alternately tolerated and ridiculed. He found himself, in consequence, under attack, both from traditionalists and the *avant garde*, with the only certainty being that New Yorkers would have to endure the scenery for decades to come.

The memorable occurrence of this opera

season in New York, as it had been for several years before, was provided by the City Center, where Maggie Teyte sang in Debussy's *Pelléas et Mélisande*. Though forty years had passed since her admired appearances in Paris, Miss Teyte's *Mélisande* was a remarkable dramatic illusion and a fabulous piece of vocal artistry. Jean Morel's expert conducting and the Golaud of Carlton Gauld were other virtues to offset the sparse décor. Other worthy deeds at the Center were a double-bill of Menotti (*The Old Maid and the Thief* and *Amelia Goes to the Ball*) and Massenet's *Werther*.

Where the real future of musical theater in America may be was suggested by the successful re-production of Marc Blitzstein's *The Cradle Will Rock* as part of the symphony series directed in the Center by Leonard Bernstein. Its verve and vitality resulted in a Broadway run which outnumbered the total of performances for any standard "classic" and pointed the way for a native repertory built around Blitzstein, Thomson, Gershwin, Kern, Rodgers and Copland. A perplexity of this situation however is that such works as *Show Boat*, *Porgy and Bess* and *Oklahoma*, which might be utilized as the back bone of such a repertory, are rigidly restricted from performance in New York, since the copyright owners look forward to long-run revivals, at intervals. In fact, the operators of the City Center, when offered the International Theater without rent, for an auxiliary season of this sort, had to turn it down, because no real repertory season could be organized.

PHONOGRAPH RECORDINGS

FOR THE second time within five years, the phonograph industry was reduced to living off its reserves when a ban on all recordings in the United States became effective Jan. 1, 1948. However, there was diminution neither of quality nor of quantity of classic recordings, at least, during 1948; and the popular market was supplied through the summer by products made previously. Nevertheless, business in this field diminished sharply from wartime levels, in part because of the prevalent opinion that there were no "new" records, but in larger part because of the rising cost of living and the shrinkage of family budgets for amusements.

Shortly after July 1, Columbia introduced its revolutionary Long-Playing (LP) Microgroove Records, which multiplied almost six times (from eight minutes to forty-five) the amount of music that could be contained on both sides of a single 12-inch record. This increase was due to a slower speed (33⅓ revolutions per minute) and a much narrower groove. Though a special player, selling at \$30, was re-

quired, the LP records were received with enthusiasm by press and public.

A quickening in the tempo of negotiations between the union and a group representing the record makers suggested that an agreement was in the making in mid-October. Negotiations were broken off abruptly when the manufacturers refused to pay, into a fund for unemployed musicians, royalties on records sold since January 1, 1948. The union abandoned this demand shortly afterwards, and an agreement was reached for a five-year contract, subject to approval by the Justice Department. It differed radically from the previous agreement in assigning control of the fund to an impartial trustee, rather than leaving it entirely discretionary with James C. Petrillo, president of the union.

The Year's Notable Recordings Classical Albums—Orchestral

Berlioz: *Romeo and Juliet* (excerpts). Rare items of the symphonic repertory, directed with even rarer art by Arturo

Toscanini. One of the best performances of the NBC Symphony Orchestra and well reproduced. (RCA Victor)

Britten: "Four Sea Interludes" and "Pascaglia" from *Peter Grimes*. Some of the best music in the opera, ably interpreted by the Concertgebouw Orchestra of Amsterdam, Eduard van Beinum directing. The spray is almost audible in the FFRR (Full Frequency Range Recording) of English Decca.

Mahler: *Symphony No. 5*. This year's extension of the Mahler repertory by Bruno Walter, and one of compelling power. The Philharmonic-Symphony Orchestra of New York, now Walter's "home" orchestra, performs in its best Viennese manner. (Columbia)

Mendelssohn: *A Midsummer Night's Dream* music. Powerful work by Toscanini, not only with the familiar "Wedding March" and "Overture," but with an "Intermezzo" and choral version of the "Scherzo" not previously recorded. Both the playing of the NBC Symphony Orchestra and the reproduction by RCA are excellent.

Ravel: *Piano Concerto* (1932). Leonard Bernstein is a "four-handed" virtuoso here, seeing to it that his ideas of the orchestral part are carried out by directing as well as playing the piano. Dazzling work, generally well reproduced. (RCA Victor)

Schubert: *Symphony No. 9 in C*. Not my idea of the best Schubert interpretation, but one widely admired for the power and drive of Toscanini's conducting. (RCA Victor)

Tchaikovsky: *Sleeping Beauty Ballet* (excerpts). Ballet music as it may be imagined but never heard in the theater; here it is embellished by the art of Leopold Stokowski, a picked orchestra that bears his name; the latest development of RCA's recording technique: PPB (Pre-Petrillo Ban)

Tchaikovsky: *Piano Concerto No. 1 in B Flat Minor*. Exemplary playing by Artur Schnabel, in a style of which he is today's most qualified exponent. Mitropoulos and the Minneapolis Symphony Orchestra collaborate, but the recording is shriller than need be. (RCA Victor)

Classical Albums—Instrumental

Beethoven: "Rasoumovsky" Quartets, Opus 59. The three quartets are performed with welcome integration and consistent understanding. The Paganini String Quartet, new since the war, is the ensemble, and well entitled to be called an ensemble as well. Superb reproduction. (RCA Victor)

Bloch: *Quartet No. 2*. A modern masterpiece of the eminent Swiss composer, played with devoted understanding by the Stuyvesant Quartet. A clean, well balanced reproduction, marred by harsh surfaces. (International)

Bruch: *Scottish Fantasy for Violin, Harp and Orchestra*. A phonographic first of work which need tempt no one else now that Jascha Heifetz's violin and Stanley Chaloupka's harp have collaborated on it. Sometimes the treatment is a little heavy for the heatherish tunes, but there is nothing but art in the soloists' playing, well supported by William Steinberg's direction. Good example of the recording being done in the Republic Sound Studio by RCA Victor.

Franck: *Sonata in A Major*. Zino Francescatti and Robert Casadesu are an unfamiliar violin and piano "team," but they demonstrate them to be one of the best. They are well favored by the reproduction. (Columbia)

Schumann: *Kinderszenen*. Highly creditable work by Maryla Jonas, who plays here like the pianist she was credited to be at her debut . . . and has not always been since. (Columbia)

Classical Albums—Vocal

Brahms: *A German Requiem*. The Vienna Philharmonic Orchestra, its Friends and Music Chorus and its musical tradition are firmly re-established by this large-scale accomplishment directed by Herbert von Karajan. Elizabeth Schwarzkopf and Hans Hotter are the soloists. There is characteristic warmth and resonance in the recording. (Columbia)

Grétry, Pergolesi, Monsigny, Dourlens: *French Opera Arias*. Recent Maggie Teyte and very good. Jean Paul Morel is the highly competent conductor. (RCA Victor)

Mendelssohn: *Elijah*. An even more successful performance than last year's *Messiah*, also directed by Sir Malcolm Sargent, in which several of the same soloists participated. Harold Williams is exceptional as the voice of Elijah. Fine recording. (Columbia)

Menotti: *The Medium and The Telephone*. Unexpectedly successful reproduction of the long-lived double bill, performed by the original casts. Emanuel Balaban's conducting and the composer's supervision complete the authenticity of the enterprise. (Columbia)

Mozart: *Requiem*. The year's third major choral work to be available in a splendidly recorded version. This venture enlists the top talent of Italy, including Victor de Sabata as conductor and Pia Tassinari, Ettore Stignani, Ferruccio Tagliavini and Italo Tajo as the soloists. Excellent in all respects. (Cetra-Soria)

Mozart: *Album Mozartiano*. An album of concert arias sung by the basso Italo Tajo. He uses his fluid voice with skill, sounding somewhat like a younger Pinza. (Cetra-Soria)

Classical Single Records

Berlioz: "D'Amour L'Ardente Flamme." An excerpt from the little-recorded *Damnation of Faust*, sung with intelligence and intensity by Rose Bampton. Wilfred Pelletier conducts with the devotion befitting his husbandly status. (RCA Victor)

Field: *Nocturne in E Minor*. Denis Matthews is an English pianist almost as unfamiliar as the music of John Field (Chopin's predecessor) which he plays; but he is likely to shed that obscurity sooner. A fine artist, well suited for this music. (Columbia)

Gounod: "Jewel Song" from *Faust*. Agile exhibitionism by Eleanor Steber, who has recently made half a dozen other records that might also be included in a summary of the year's best. (RCA Victor)

Handel: "Care Selve" from *Atalanta*. Ada Alsop is another of the new group of English artists and will be a welcome visitor, if this sonorous singing represents her customary manner. (English Decca)

Offenbach: *Orpheus in Hades Overture*. A racy disposition of the cinema favorite, glorified by the Boston "Pops" Orchestra and Arthur Fiedler. Bright. (RCA Victor)

Ravel: *Pavane pour une Infante Défunte*. Whether or not this is a reminder of the song popular half a dozen years ago as "The Lamp is Low," it is something of unusual credit for Serge Koussevitzky, who conducts it, and the Boston Symphony Orchestra, which performs it. (RCA Victor)

Rossini: "La Callunia" from *The Barber of Seville*. Ezio Pinza at his best, which means vocal art of distinction and as much drama as the music demands. As much could be said of the "Coat Song" from *La Bohème* on the other side. (Columbia)

Schubert: "Die Junge Nonne." Beautiful reproduction of Kathleen Ferrier's strong, well-timbred contralto. Admirable interpretation. (English Decca)

Children's Records

Alice in Wonderland and Through the Looking Glass. An all-star cast in a favorite of children's literature, featuring music by Richard Addinsell and performances by Bambi Linn, Eva Le Gallienne and Margaret Webster. (RCA Victor)

Johnny Stranger. Something new in Americana, re-created by Ray Middleton. A "Ballad for Americans," youthfully conceived. (RCA Victor)

Young People's Records Composers Series. Musical indoctrination for the young, well supervised by Walter Hendl. Stravinsky and Copland are among the subjects treated. (Young People's Records, Inc.)

The Pied Piper of Hamelin. A new field for Alec Templeton and an appropriate one. Apt material, well delivered. (RCA Victor)

The Young Person's Guide to the Orchestra. Out of Benjamin Britten's effort for an English educational film has come the year's outstanding music for the youthful listener. Education and pleasure are skillfully blended in a series of variations utilizing all the instrumental choirs. (Columbia)

Popular and Dance Records

Clark, Buddy: "Ballerina." Whether or not you know this is a bolero, it is an engaging tune, well sung. (Columbia)

Cole, Nat: "Nature Boy." One of the year's phenomena, by a disciple of Yoga who insists his name is eden abhez. This is the authentic version of the song and as good as any. (Capitol)

Como, Perry: "Haunted Heart." The nearest thing to a hit from *Inside U.S.A.* in the nearest thing to a hit version. (RCA Victor)

Ellington, Duke: *Mood Ellington*. An album of new instrumentals by the reigning sovereign of the style. "Hy'a Sue" and "Three Cent Stomp" are good, even for Ellington. (Columbia)

Fitzgerald, Ella: "Lady Be Good." The bebop manner transferred to the voice. Not much Gershwin, but good Fitzgerald. (Decca)

Lee, Peggy: "Mañana." Either "Golden Earrings" or "Don't Smoke in Bed" might also serve as a nomination to represent Miss Lee, but this song probably had a larger vogue. (Capitol)

Sinatra, Frank: "I've Got a Crush on You." Perhaps this revival will finally establish one of the best Gershwin tunes in the niche to which it is entitled. The singing is first-class. (Columbia)

Show and Miscellaneous Albums

Inside U.S.A. More than the best of the Dietz-Schwartz score, since Beatrice Lillie includes "Atlanta," which was omitted in the stage production. Jack Haley does his specialties, too, and Perry Como sings the ballads. (RCA Victor)

Songs of Our Times. A remarkable undertaking, which, when completed, will cover each year from the First World War to the Second with an album of its popular songs. In all, nearly 400 tunes venerated by Americans will be included, varying from "Ain't She Sweet" to "Ol' Man River." Each set has excellent background notes by Louis Untermeyer. (Decca)

Beatrice Lillie Souvenir Album. A half dozen choice items from the repertory of things that have made Miss Lillie's name celebrated. Among them are "Wind 'Round My Heart," "Clomp! Clomp! Clomp!" and "Lady Windermere's Fan." A session of high spirits, neatly reproduced. (Decca)

NEWS RECORD OF 1948

Compiled by

THE NEW YORK HERALD TRIBUNE



DECEMBER, 1947

- 2 CIO Pres. Philip Murray announces he will seek Third Round of wage increases to help labor meet price inflation.
- 3 Riots sweep Palestine as Arabs attack Jews in protest against partition.
- 12 John L. Lewis takes his United Mine Workers out of AFL.
- 14 Russia devalues ruble as much as 90% to curb inflation; ends food rationing.
- 15 London session of Council of Foreign Ministers fails to agree on peace treaties for Germany and Austria.
- 19 Congress votes \$540-million winter relief for France, Italy, Austria and China.
- 26 New York City paralyzed by record snowfall of 25.8 in.
- 29 Henry Wallace announces his candidacy for President on third-party ticket.
- 30 King Michael abdicates in Rumania; says later he was forced off throne by Communists.

DIED: 7—Nicholas Murray Butler, 85; 13—Stanley Baldwin, 80; 17—I. J. Fox, 58; 21—Rep. (Va.) Patrick Drewry, 72; Mark Hellinger, 44; 28—Victor Emmanuel III; Frank Crowninshield, 75; 30—Alfred North Whitehead, 86.

JANUARY, 1948

ELECTION YEAR opened—year of the big wind from the mouths of a thousand candidates. People started making election bets, which would be remembered in November by the winners, forgotten by the losers. The most popular man in America was General Eisenhower; polls showed he could have the Presidency by the nod of his head. He said no; he "could not accept the nomination," because military men were not suited to be President of this civilian nation. (See March for MacArthur's view.) In this bright, new political year, nervous Americans will smoke 350 billion cigarettes, more than double what they smoked before the war. And they will read a new book by Kinsey called *Sexual Behavior in the Human Male*, which says American men aren't as monogamous as they look when wearing their church clothes, which, it seems, they often take off. Westchester (N.Y.) housewives were in

a swivet because they couldn't find maids to hire, so they imported thirty young Puerto Rican women to begin at \$25 a week. And a New York commuter sued the Long Island Railroad because it took his train 8½ hours to go 4½ miles after the big snowstorm of Dec. 26. In this topsyturvy month, the most peaceable man in the world—a man who had devoted his life to preaching non-violence—met a violent death: the wizened little saint, Mohandas K. Gandhi, was shot by an assassin.

- 1 England nationalizes railways.
- 2 India appeals to U.N. to stop "aggression" by Moslem Pakistan.
- 5 U.N. Little Assembly meets for first time; boycotted by Russia, Poland, Yugoslavia, Czechoslovakia, the Ukraine and Byelorussia.
- 6 France enacts forced loan to combat inflation.
- 7 Congress hears Truman propose \$40 income tax cut for everybody.
- 12 Truman budget submitted: \$39,668,993,983 for fiscal year 1949—\$2 billion increase over current budget, due to bigger armed forces and international aid.
- U.S. Supreme Court orders Oklahoma to provide legal education for Negro girls.
- 14 Truman economic report warns of recession unless inflation is halted.
- 15 Secretary of the Interior Krug urges nation to save 15% in fuel oil to ease "critical" shortage.
- 17 Dutch sign truce with Indonesian Republic in Java, retaining rich oil and rubber areas.
- 21 State Department publishes secret German documents showing Stalin-Hitler plot in 1940 to divide world.
- 23 Million workers go on one-day strike in Bavaria, protesting lack of food.
- Gen. Eisenhower says he "could not accept nomination" for the Presidency.
- 25 France devalues franc from 119 to 214.392 to U.S. dollar.
- 27 Truman removes Marriner S. Eccles a chairman of Federal Reserve Board, in step toward fiscal conservatism.
- 28 Longest U.S. cold wave in 12 winter shuts schools and factories for lack of fuel oil.

30 Gandhi is assassinated by Hindu fanatic who wanted war against Moslem Pakistan.

DIED: 5—Mrs. Benjamin Harrison, 89; 8—Richard Tauber, 55; Charles Michelson, 79; 15—Josephus Daniels, 85; 21—Ermanno Wolf-Ferrari, 72; 30—Herb Pennock, 53; Orville Wright, 76.

FEBRUARY

COMMUNISTS SEIZED Czechoslovakia, and the world shuddered—just as it had shuddered ten years ago when the Nazis seized Czechoslovakia. Was Stalin following in the footsteps of Hitler? And if so, would the same horrible chain of events ensue? People in America made sour comments about Jan Masaryk, the supposed friend of Western democracies, who docilely remained as Foreign Minister under the Communist regime (For sequel, see March). In Washington, the Department of Commerce announced that there would be a hundred "special weeks" in 1948, including National Laugh Week, to put a smile on the American mush, and National Large Size Week, meaning large size tubes of toothpaste, etc. In Moscow, they were worried about their songs. It seems that the big three of Soviet composers—Shostakovich, Khachaturian and Prokofieff—let the party line slip their minds, and wrote bourgeois music accidentally. They were spanked, but soundly. In Florida, capitalism came to its romantic flower when the millionaire oil man, Winthrop Rockefeller, married the coal-digger's daughter, the former Eva Paulekas. And at the U.N. at Lake Success, Russia made a protest against the American habit of beating wives. In Alabama, said the Russians, it is lawful to beat your wife if your club is not more than two inches thick. The Attorney General of Alabama said few men took advantage of the law.

2 U.S. rejects Soviet protest against presence of American warships in Italian ports; brands as false Russian charges that we are making Iran a military base.

4 Britain freezes wages to curb inflation. Sudden drop in commodity and Stock Exchange prices causes flurry of fear of recession.

7 Gen. Eisenhower quits as Army Chief of Staff; Gen. Omar N. Bradley succeeds him.

13 Russia sets up German quasi-government in eastern occupation zone.

16 Truman asks Congress for more funds to help Greece beat Communist rebels; includes Turkey for aid.

U.S. seizes Ferdinand C. Smith, secretary of National Maritime Union, for deportation as alien Communist.

17 President of Chile claims Antarctic islands presently under British rule.

18 Eamon de Valera ousted as Prime Minister of Eire after 16 years; John A. Costello elected.

Truman asks Congress for \$570 million relief for China.

22 Heavy bomb explosion in Palestine wrecks 3 blocks, kills 54.

23 Sen. Glen H. Taylor of Idaho bolts Democratic party to run for Vice President on Henry Wallace's third-party ticket.

5 Southern Governors, angry at Truman civil rights program to aid Negroes, say "South is no longer 'in the bag' for Democratic party."

24 Truman orders inquiry into steel industry price rise.

25 Communists seize power in Czechoslovakia; President Eduard Beneš yields.

26 U.N. Little Assembly, voting 31-2, recommends elections for independent government in American-occupied South Korea.

29 Navy FJ1, jet fighter plane, sets new speed record, flying 950 mi. from Seattle to Los Angeles in 1 hr., 58 min., 7 sec.

Jewish terrorists blow up British train in Palestine, killing 28 British soldiers.

DIED: 2—Thomas W. Lamont, 77; 5—Simeon Strunsky, 68; 9—Burns Mantle, 74; 10—Sergei Eisenstein, 49; 14—Mordcaai Brown, 71; 16—Gennaro Cardinal Pignatelli, 96; 23—John R. Gregg, 80; 24—Will Irwin, 74.

MARCH

THE TRAGIC MYSTERY of the month, which probably never will be solved, was this: Did Jan Masaryk, the Foreign Minister of Czechoslovakia, kill himself? Or was he thrown out of the window of his apartment in Prague? In either case, the world guessed that Soviet Russia was involved. And the non-Communist world mourned a hearty, joke-loving, un-Communist soul. By contrast, nobody much cared when the Russians shoved young King Michael off the throne of Rumania, thus doing away with an inept dynasty. In America, people read *Jim Farley's Story*, and they marveled that Roosevelt's ace political factotum thought all along that he would make a better President than his Boss. A 700-pound moose named Mushkig appeared on the radio and said moo in an unrehearsed way. One thousand people in Valley Stream, Long Island, gathered to pray for world peace—just three years after the war to end war. In Louisiana, Earl Long (brother of Huey) was elected Governor; he invited everybody, but everybody, to his inaugural party to partake of

buttermilk, soda pop and hot dogs, if he had to kill every "hawg" on his place. Even happier, in this happy month, was the Gideon Society, which at long last got permission to spot 23 tons of Bibles in the mildly ungodly hotels of Miami Beach.

- 2 Senators criticize steel industry for raising prices.

Snowfall in New York City reaches total of 58.4 inches, setting record since winter of 1892-93.

- 4 Ex-King Michael of Rumania repudiates his abdication as forced by "a foreign country." Sails from England for U. S. next day.

- 5 U. N. Security Council votes 8 to 0 to put problem of Palestine partition up to Big Five consultation.

- 6 Western Allies agree on international control of Germany's Ruhr.

Ross Lockridge, author of best-selling novel, *Raintree County*, kills himself at age of 33.

- 10 Jan Masaryk, 61, Foreign Minister of Czechoslovakia, plunges to death; Czech Reds say it was suicide.

- 15 Soft coal miners quit work to win pension system.

- 16 Meat packinghouse workers go on strike for more pay.

- 17 Truman asks Congress to revive draft to forestall Russian aggression; also asks for UMT.

Five nations (England, France, Belgium, Netherlands and Luxemburg) sign 50-year treaty of alliance.

- 19 U. S. abandons support of Palestine partition plan.

- 20 U. S., England and France propose that Trieste be returned to Italy.

- 24 Congress passes bill to cut income taxes by \$4.8 billion.

- 25 U. S. military leaders ask \$3 billion more for rearmament, in addition to President's \$11-billion budget.

- 27 First Taft-Hartley Act injunction against big union is directed against International Typographical Union. (It obeyed.)

- 29 Spokesman says Eisenhower's refusal to be drafted for President applies to Democrats as well as Republicans.

- 30 Ninth International Conference of American States opens in Bogotá, Colombia.

- 31 Russia imposes rigid controls on English, French and American traffic between Berlin and Western zones; Western allies halt their trains rather than submit.

DIED: 7—James L. McConaughy, 60; 26—Warren Hymer, 42.

APRIL

SOME FOLKS found out that all you have to do to make a big success of life is to listen to the radio. A grandmother living in a three-room shack on a New Mexico Indian reservation won—in one evening, mind you—a Mutual Network haul that included an automobile and trailer, a Persian lamb coat, a diamond ring, a hair dryer, a fitted calf bag, an electric washer, a table-model cigar lighter and countless other things she didn't need; total value, \$35,000. In Hollywood, Lana Turner won a prize at the altar—millionaire Henry J. (Bob) Topping; they had something in common, it was the fourth wedding for each. In Brooklyn, a gang of schoolboys fired a fusillade of shots at the home of their teacher, hoping to scare her into passing everybody in math. And in Washington, Congress passed the \$6.098 billion Global Aid Bill, embarking the U. S. on the world's greatest philanthropic enterprise. But it wasn't philanthropy alone; we figured that an economically healthy Europe was less likely to get swallowed by Communist Russia. One day before the aid bill was passed, Russia began her sinister siege of Berlin. Hoping to drive U. S., British and French occupation troops out of Germany's capital, the Russians choked off food supplies to the Western sectors of the city.

- 2 Congress passes Global Aid Bill of \$6.098 billion, including European Recovery Program.

Congress enacts income-tax cut over Truman veto.

- 3 Federal court orders John L. Lewis to end coal strike; he ignores order.

- 5 Paul G. Hoffman is appointed Economic Cooperation Administrator of ERP.

- 6 Stassen in Wisconsin Republican primary wins 19 delegates against 8 for MacArthur, none for Dewey.

Finland signs 10-year mutual defense and friendship treaty with Russia.

- 9 Revolution in Bogotá, Colombia, disrupts Pan-American conference of twenty-one nations.

- 10 Russia vetoes Italy's application for U. N. membership for third time.

Eisenhower reiterates he won't run for President.

- 12 John L. Lewis orders coal miners back to work after agreeing on \$100-a-month pension for those over 62.

Ten-foot statue of F. D. Roosevelt unveiled in London.

- 13 Stassen wins Nebraska primary over Dewey and other Republicans.

- 15 Pan American London-New York plane crashes in Shannon, Eire, killing 30.

- 18-19 Communists beaten in Italian elections, winning only 31 percent of vote. Christian Democratic party wins 49 percent.
- 19 Federal District Court convicts John Howard Lawson, film writer, of contempt of Congress for failing to say whether or not he was a Communist.
- 20 Federal court fines John L. Lewis \$20,000 and United Mine Workers \$1,400,000 for criminal contempt in failing for one week to obey court order to call off coal strike.
- Assassin wounds Walter P. Reuther, President of United Automobile Workers, firing through his kitchen window.
- 22 U. S. Steel rejects wage increases and cuts certain steel prices about \$25,000,000 a year in move against inflation.
- Haganah, Palestine Jewish militia, captures Haifa.
- 27 Stassen wins Pennsylvania primary.
- 28 Marshall Field III sells controlling interest in his New York newspaper *PM* to Bartley C. Crum and Joseph Barnes.
- 30 Five Western European Union nations establish joint military committee for common defense.
- DIED:** 5—Mrs. John D. Rockefeller, Jr., 73; Angelo J. Rossi, 70; 7—Rep. (Mo.) Orville Zimmerman, 67; 11—Jock Sutherland, 59; 15—Manuel A. Roxas, 56; 27—William S. Knudsen, 69; 28—Tom Breneman, 48.

MAY

PEOPLE OF the month: *Mrs. Dorothy Lavelor*, 28-year-old divorced hatcheck girl in a Long Island roadhouse, who advertised her desire to marry a man who would plunk down \$10,000 cash. Newspaper readers followed her zestfully as she interviewed candidates. One Danny Wicker in Florida offered to boost the ante to \$13,000 and she went down to look him over, but it turned out he wasn't quite shed of his wife. *Garry Davis*, 26, former Broadway actor (son of orchestra leader Meyer Davis) who formally renounced his U. S. citizenship in Paris to become a "citizen of the world." He thought world peace could come only through abolition of national sovereignties, so he would make a start by dropping allegiance. *Eden Ahbez*, bearded recluse and practitioner of Yoga, whose song "Nature Boy" suddenly became a smash hit. The woolly hero emerged from the wilds of California to those of his native Brooklyn, where he camped out in his sleeping bag on a garage roof. . . . But, really, the people of the month were the *Jews of Palestine*, who realized the 2,000-year-old dream of a Jewish national homeland. The British gave up their mandate, hauled down their flag in Jerusalem, and

the new nation, Israel, was born—born in peril, surrounded by hostile Arab states as though by a ring of hungry wolves. As the Arab invaders swarmed into Palestine, the Jews fought them off. A new war was born, in a world already far too warlike.

- 1 Sen. Glen Taylor is arrested in Birmingham, Ala., for trying to enter a meeting through the Negro entrance.
- 3 Supreme Court forbids states to enforce agreements not to sell property to racial minorities.
Chakravarthi Rajagopalachari appointed first Indian Governor General of India, succeeding Earl Mountbatten, last British Viceroy.
- 6 Congress passes bill to raise U. S. Air Force to seventy air groups.
- 10 U. S. seizes railroads and obtains court order preventing nationwide strike; unions obey; Army runs roads.
Southern Korea holds elections to draw up constitution for free government. Independence Party (anti-Communist) wins.
- 12 Sec. Marshall bars two-nation negotiations with Russia for general settlement, after Moscow invites them.
- 13 Gromyko announces projected return (in July) to Russia for vacation.
- 14 British end mandate over Palestine. Jews proclaim new nation, Israel.
Bull market on stock exchange; 3,840,000 shares traded, most since May 21, 1940.
- 16 Arab armies invade Palestine from both north and south.
U. S. radio reporter, George Polk, found shot in Greece.
- 17 U. N. gives up attempt at international control of atomic energy because of Russian opposition to majority.
- 20 Big Four gives up attempt at writing peace treaty for Austria because of Russian demands.
- 24 Russia uses twenty-fourth and twenty-fifth vetoes in Security Council to kill inquiry into Czech coup.
- 25 General Motors grants 11-cent wage increase to UAW; wages to move up or down according to living costs.
- 27 Attorney General Clark rules no Communist may hold Federal job.
- 28 About 2,500 Jews inside walled Old City of Jerusalem surrender to Trans-Jordan Arab Legion.
- 30 Columbia River flood engulfs all of Vanport City, Ore.

DIED: 2—Wilhelm von Opel, 76; 14—Sen. (La.) John H. Overton, 72; 15—Msgr. Edward J. Flanagan, 61; Dr. James E. West, 71; 25—Gov. (Ariz.) Sidney P. Osborn, 64; 29—Dame May Whitty, 82.

JUNE

AT THE BEGINNING of that sweltering convention in Philadelphia, three men were radiantly happy—Stassen, Taft, Dewey. Each man KNEW the Republicans would nominate him for President and the voters send him to the White House. In addition to those three happy men, there were at least a dozen more who tingled with the sweet suspicion that lightning might strike them. But at the end of that sweltering week, only two men retained their radiance—Dewey and Warren. Nobody thought to ask why anybody would yearn for the Presidency in a month which saw Russia tightening the squeeze on Berlin . . . and booting out President Beneš of Czechoslovakia in favor of the Communist Gottwald . . . in a month which saw Congress drafting American youth to build up our Army . . . and U. S. meat prices climbing to an all-time high (\$1 a pound for steak). But life went on, and the non-fiction best-seller book list was a race between Dr. Kinsey's *Sexual Behavior in the Human Male* and Rabbi Liebman's *Peace of Mind*. The U. N. decided to investigate a complaint that would have interested Dr. Kinsey—whether the King of the Bikom tribe in the British Cameroons had 600 wives or only 110. And Jimmy Moran, a New Orleans restaurateur, bought trousers with a diamond-studded zipper.

- 2 White House picketed by 3,169 marchers protesting Mundt-Nixon bill to control Communists.
- 3 Paraguayan army deposes President Higinio Morínigo.
World's largest telescope, 200-inch mirror, is dedicated on Palomar Mountain, Calif.
- 5 Ford Motor Co. increases auto prices \$85 to \$125.
- 7 Eduard Beneš resigns as President of Czechoslovakia rather than sign new Communist constitution.
- 8 General Electric grants 8-percent, 11-cents-an-hour pay rise.
- 9 Truman says present Congress is worst in U. S. history.
- 10 Ex-King Michael of Rumania weds Princess Anne of Bourbon-Parma.
U. S. reveals that X-1 jet planes flew faster than sound.
- 11 Palestine war ceases for four weeks under U. N. truce.
- 12 New York City celebrates golden jubilee of consolidation of its five boroughs.
- 17 England and France agree to set up separate state of West Germany under Western Allies' control.
Forty-three die in crash of United Air Lines DC-6 near Mount Carmel, Pa., en route from San Diego to N. Y.

19 Congress votes to draft men 19 through 25.

Russia stops all rail and road traffic between Berlin and Western German occupation zones, isolating Americans, British and French in city.

20 Congress appropriates \$6,030,710,228 for ERP and other foreign aid for 12 months.

24 Gov. Dewey nominated by Republicans on third ballot at Philadelphia.

Russians clamp complete land blockade on traffic from Western Germany into American, English and French sectors of Berlin.

25 Republicans nominate Gov. Earl Warren for Vice President.

Truman signs bill to admit into U. S. 205,000 European displaced persons in next two years; calls it "flagrantly discriminatory."

28 Communist Information Bureau (Cominform) denounces Marshal Tito, Yugoslav Premier.

29 Earthquake destroys about 70 percent of Fukui, Japan; 3,000 estimated dead.

DIED: 7—Rep. (Ill.) Thomas L. Owens 50; 9—Rabbi Joshua Loth Liebman, 41; 10—Lewis B. Schwellenbach, 53; 14—Gertrude Atherton, 90.

JULY

YOU COULD just about count on your thumbs the men in American history who had turned down an almost sure opportunity of becoming President of the U. S. Such a man turned up this month—Ike Eisenhower. The Democrats were desperate to nominate him. The big-city bosses in the party and the little people—the conservative Democrats and the New Dealers—even the Southerners—they all yearned to make Ike their candidate. That yearning, for many people, grew out of deep confidence and affection for the man others thought he was the only Democrat who could win the Presidency in November. Almost gruffly, Ike said no. He "would not accept nomination for any public office. So the unhappy Democrats renominated Truman, giving the elderly Senator Barkley the second spot. And some rebellious Southern Democrats (who later became known as the "Dixiecrats") nominated a ticket of their own. Utterly oblivious of presidential politics, *Harper's Bazaar* announced its big news: that manes and mops were being chopped and shaped into slicks and swirls; translated, this meant modish women would wear their hair shorter. In Europe, a horrid family quarrel blossomed behind the Iron Curtain. Soviet Russia got mad at Marshal Tito and told the Yugoslavs to overthrow their boss—Ike wasn't sweet enough about taking Moscow's orders. The West watched the scramble with the keenest enjoyment.

- 1 New York City subways charge dime instead of nickel.
Russians withdraw from the Allied Kommandatura, the four-power government of Berlin.
- 5 Carole Landis, movie actress, commits suicide at 29.
Britain adopts National Health Service Act providing free medical service for everybody who requests it.
Eisenhower says he "would not accept nomination."
- 6 U.S., Britain and France send notes to Russia demanding end of Soviet blockade of Berlin.
- 9 War resumes in Palestine after Jews consent to extend U.N. truce another 4 weeks, but Arabs refuse.
- 15 Democrats nominate Truman and Barkley. President calls special session of Congress.
Russia rejects U.S.-British-French demand that it end blockade of Berlin.
- 16 U.S. Steel abandons fight against inflation; raises wages 13 cents an hour and boosts prices.
- 17 Southern Democrats from 13 states nominate Gov. J. Strom Thurmond of S.C. for President, and Gov. Fielding Wright of Miss. for Vice President.
- 18 Arabs and Jews obey U.N. order to cease fire in Palestine under threat of penalties.
- 20 U.S. arrests 12 Communist party leaders for advocating overthrow of the government.
- 22 Ford grants 13-cent hourly pay increase, ending threat of strike in automobile industry.
- 24 Progressive party nominates Wallace and Taylor as its candidates for President and Vice President.
André Marie, Radical-Socialist, becomes French Premier.
General Motors increases automobile prices by 8 percent.
- 26 Congress convenes in special session, with Truman demanding anti-inflation and housing legislation.
- 29 King George opens Olympic Games in London.
Harold E. Stassen accepts Presidency of University of Pa.
- 30 Elizabeth Bentley says high government officials helped her get secrets for Communist spy ring.
- 31 New York International Airport at Idlewild, Queens, dedicated; largest commercial airport in world.

DIED: 15—Gen. John J. Pershing, 87; 23—David Wark Griffith, 73; 27—Joe Tinker, 68.

AUGUST

NOTHING LIKE a few Russian spy mysteries for hot-weather reading—almost as good as the old-time murder thrillers. There was the mystery of the Russian teachers. The Soviet Consul said Mrs. Kasenkina was taken into the consulate to protect her from "White Russian kidnappers" trying to keep her in America. After a week of such protection, Mrs. Kasenkina gave her own dramatic answer: she jumped out of the consulate's window to avoid being forcibly shipped back to Russia. Then there was the mystery of the Prominent Men. They testified before House investigators of un-American activities. Whittaker Chambers, a senior editor of *Time* magazine, accused Alger Hiss, president of the Carnegie Endowment for International Peace, of having been a Communist while working for the State Department in the 1930s. Said Hiss: "Chambers is lying." Said Chambers: "Hiss is lying." Said the House investigators: "Somebody ought to be charged with perjury." . . . Sadness came to the whole nation when Babe Ruth died. Physicians had tried a new drug in the hope it would kill his cancer; at first it seemed to improve him miraculously, then it failed. In his will the Babe specified for "the kids of America" one-tenth of his estate. . . . The government gave us the bad news about the cost of living reaching a new all-time high. The prewar dollar was now worth 58 cents in terms of what it would buy. But progress was marching on: Chicago hotels had Gideon Bibles with alcohol-proof covers.

2 Envoys of U.S., Britain and France see Stalin, proposing negotiations on German problem.

Senate filibuster kills bill to abolish poll tax in Southern states.

3 Whittaker Chambers, former Communist, says Communists maneuvered themselves into key U. S. government posts before war.

5 Congress approves \$65 million U.S. loan to U.N. for building headquarters in New York.

Truman assails two Congressional spy inquiries as "red herring."

7 Congress adjourns after passing anti-inflation and housing bills denounced as weak by Truman.

Russia protests to U.S. against "abduction" of three Russian teachers in New York who avoided returning to Russia.

12 Mrs. Kasenkina, Russian teacher, jumps out of Soviet consulate in New York; says later she had been "prisoner."

U.S. grants recognition to Korean government set up under U.N. supervision.

13 Russians formally put an end to four-power government in Berlin.

- 17 Alger Hiss meets Whittaker Chambers, who accused him of being a Communist in the 1930s; admits he knew him under different name, denies Communism charge.
 - 18 New River Danube treaty, completed in Belgrade, gives Russia control of river; U.S., England and France refuse to sign. Russia used 27th veto in Security Council to bar entry of Ceylon into U.N.
 - 19 U.S. orders curbs on installment buying, effective Sept. 20.
U.S. demands Russia recall Consul General in New York for improper conduct in case of refugee Russian teachers.
 - 21 New York opens Golden Anniversary Exposition.
 - 22 First international assembly of World Council of Churches opens in Amsterdam.
 - 24 Russia closes consulates in U.S., and demands we close ours in Vladivostok.
 - 26 New York City has third hottest day in history, 100.8 degrees.
 - 28 André Marie cabinet falls in France after little more than a month, over economic reform.
 - 30 North Carolina crowds pelt Henry Wallace with eggs and tomatoes on presidential campaign tour.
American men 18 through 25 begin registering for nation's second peacetime draft.
- DIED:** 4—Enrico Cardinal Sibilla, 87; 16—Babe Ruth, 53; Harry Dexter White, 55; 27—Charles Evans Hughes, 86; 31—Andrei A. Zhdanov, 52.

SEPTEMBER

FOR MANY MOONS, more Americans had been buying *Peace of Mind* than any other work of nonfiction. But their minds still were not peaceful. Now, of a sudden, they rushed to the bookstores to buy Dale Carnegie's *How to Stop Worrying and Start Living*. There was, indeed, plenty to worry about. England, France and the U. S. broke off their secret negotiations with Russia and appealed to the U.N. to stop Russia's 100-day-old land blockade of Berlin's western sectors. Britain began re-arming. And the U. S. listened to hundreds of thousands of words of presidential campaign oratory, most of which went into one ear and out the other. Truman at least won the eating honors; in Texas, he breakfasted on fried chicken, ham, scrambled eggs, rice, hot biscuits, honey and white dove. Two New Yorkers paid \$50 fines each for displaying a woman's hat, fifty-nine years old, in a store window; it had bird of paradise feathers on it, and that's against the law. Scientists fell to worrying

whether the world would: (a) capsizelike an overloaded canoe; or (b) would run short of food to feed the dizzily expanding population. But N. Y. bricklayers were happy; their wage went up to \$27 a day.

- 6 Queen Wilhelmina of the Netherlands abdicates after reigning fifty years; Juliana becomes Queen.
Communists storm Berlin City Hall, ending German democratic administration of four-sector city.
- 8 Georgia, in primary, assures governorship to Herman Talmadge, advocate of "white supremacy."
U. S. orders larger bank reserves to curb inflation.
- 10 France ends 7-week cabinet crisis by making Henri Queuille Premier.
- 15 Big Four disagree on disposition of Italy's colonies; problem goes to U.N.
U. S. sues to split "Big Four" meat packers into 14 independent companies.
- 17 Count Bernadotte, U.N. mediator in Palestine, slain in Jerusalem.
Hyderabad surrenders to India after 109-hour "war."
- 19 Russia promises to withdraw all troops from Northern Korea by Jan. 1; urges U. S. to withdraw from southern part.
- 21 U.N. General Assembly opens annual session in Paris; Herbert V. Evatt, of Australia, elected President.
- 25 U. S. discloses jet-plane speed approaching 900 miles an hour.
- 29 U. S., England and France ask U.N. to consider Berlin crisis as "threat to peace." Secret negotiations in Moscow are broken off.
- 30 U. S. urges U.N. General Assembly to support atomic energy control plan balked for two years by Russia.

DIED: 1—Charles A. Beard, 73; 3—Eduard Beneš, 64; 10—Ferdinand I, of Bulgaria, 87; 11—Mohammed Ali Jinnah, 71; 12—Rupert D'Oyly Carte, 71; 17—Emil Ludwig, 67; 30—Mrs. Theodore Roosevelt, 87.

OCTOBER

NEVER SATISFIED, the great American public began grumbling about its shiny new postwar automobiles—too big to park; too big for the garage; too costly to repair. Private motorists had been spending a total of \$490 million a year to keep up their gas buggies in the war years; now found the bill soaring to a billion. And the Federal Communications Commission began grumbling about those radio shows that lured listeners by giving away prizes totaling \$2 million a year; should they be suppressed as lotteries? "Amen!" said Fred Allen, who had seen his program popularity

sink to a new low under the competition of "Stop The Music." Allen insured his listeners up to \$5,000 if they lost any giveaway prizes while tuning him in. That lonely figure, Harry Truman, kept up his hopeless campaign for the Presidency. Everybody knew he couldn't win; after all Gallup, Roper and Crossley agreed that Dewey was in. Game to the end, Truman said: "On the day after election some of the reddest faces in America will be those pollsters." People thought, surely Truman can't believe it himself.

5 Russia refuses to participate in Security Council discussion of Berlin crisis, saying it is a matter for Big Four.

Dr. Karl T. Compton succeeds Dr. Vannevar Bush as head of U. S. military research.

7 Premier Hitoshi Ashida resigns in Japan as result of bribery scandal reaching into Cabinet.

9 Winston Churchill advocates bringing matters to a head with Russia now, before it gets atom bomb.

10 Dr. Carlos Prío Socarrás succeeds Grau San Martín as President of Cuba.

Juan Manuel Galvez elected President of Honduras; to take office Jan. 1.

11 United Mine Workers double John L. Lewis' salary to \$50,000 a year.

12 U. S. rejects Russian proposal to U.N. that big nations cut armaments one-third in a year.

16 Fighting resumes in Negeb area of southern Palestine despite U.N. truce.

20 Communists revolt in American-occupied southern Korea.

22 One-week renewal of Palestine warfare ends with Israel wresting control of Negeb from Egyptians.

25 Russia vetoes U.N. plea to lift Soviet blockade of Western Berlin.

26 Five European Western Union nations ask U. S. and Canada to join in North Atlantic military alliance.

27 Gen. Manuel Odría launches successful coup in Peru; ousts Bustamente y Rivero who quit on the 29th.

28 Stalin, in interview, accuses West of breaking agreements in order to foment war.

Dr. Paul Mueller, Swiss scientist who developed DDT spray, wins 1948 Nobel Prize for Medicine.

30 First shipload of 813 DP's arrive in N. Y.

31 18 die in Donora, Pa., when smog blankets town.

DIED: 5—Wilbur L. Cross, 86; 18—Field Marshal von Brauchitsch, 67; 21—Elissa Landi, 43; 22—August Cardinal Hlond, 67; 24—Franz Lehar, 78; 28—Rep. (Tex.) Milton H. West, 60.

NOVEMBER

A GREAT ROAR of laughter arose from the land on Wednesday, Nov. 3, when the presidential votes were counted. Pollsters, pundits, prognosticators had slipped on the most gigantic political banana peel in U. S. history. Only Harry had the right dope. Said Columnist Alsop: "We prefer our crow fricassee." Said Pollster Roper: "I couldn't have been more wrong; why, I don't know." Columnist John O'Donnell grumpily asked his boss to send the *Daily News'* tame astrologist down to the Washington bureau; she had forecast Truman's victory. As for the President, he refused to do any gloating. To the cheering throng that greeted him in Washington: "I count on your helping me through the great and grave responsibilities of the next four years."

1 Chinese Communists capture Mukden, giving them control of Manchuria.

2 Truman and Barkley elected; Democrats control both Houses of Congress.

3 U.N. General Assembly unanimously asks Big Five to get together on peace.

4 Nobel prizes to: T. S. Elliot (American born British poet) for literature; Patrick M. S. Blackett (of Britain) for physics; Arne Tiselius (of Sweden) for chemistry.

6 White House social season canceled as President's home unsafe and closed for repairs.

7 President Truman goes to Key West, Fla., for two-week post-campaign vacation.

8 Rep. J. Parnell Thomas indicted on charges of conspiracy to defraud government by salary kick-backs; stands on his constitutional right and refuses to testify.

10 Longshoremen's strike ties up New York and other Atlantic coast ports.

U. S. and Britain turn over ownership of Ruhr coal and steel industries to German trustees.

12 Tojo and six other Japanese war leaders sentenced to hang; sixteen others get life prison terms as 2½ year Tokyo war crime trial ends.

Sec. Marshall, in Paris, brands Soviet peace drive a propaganda move.

Premier Sophoulis, of Greece, resigns; cabinet is out.

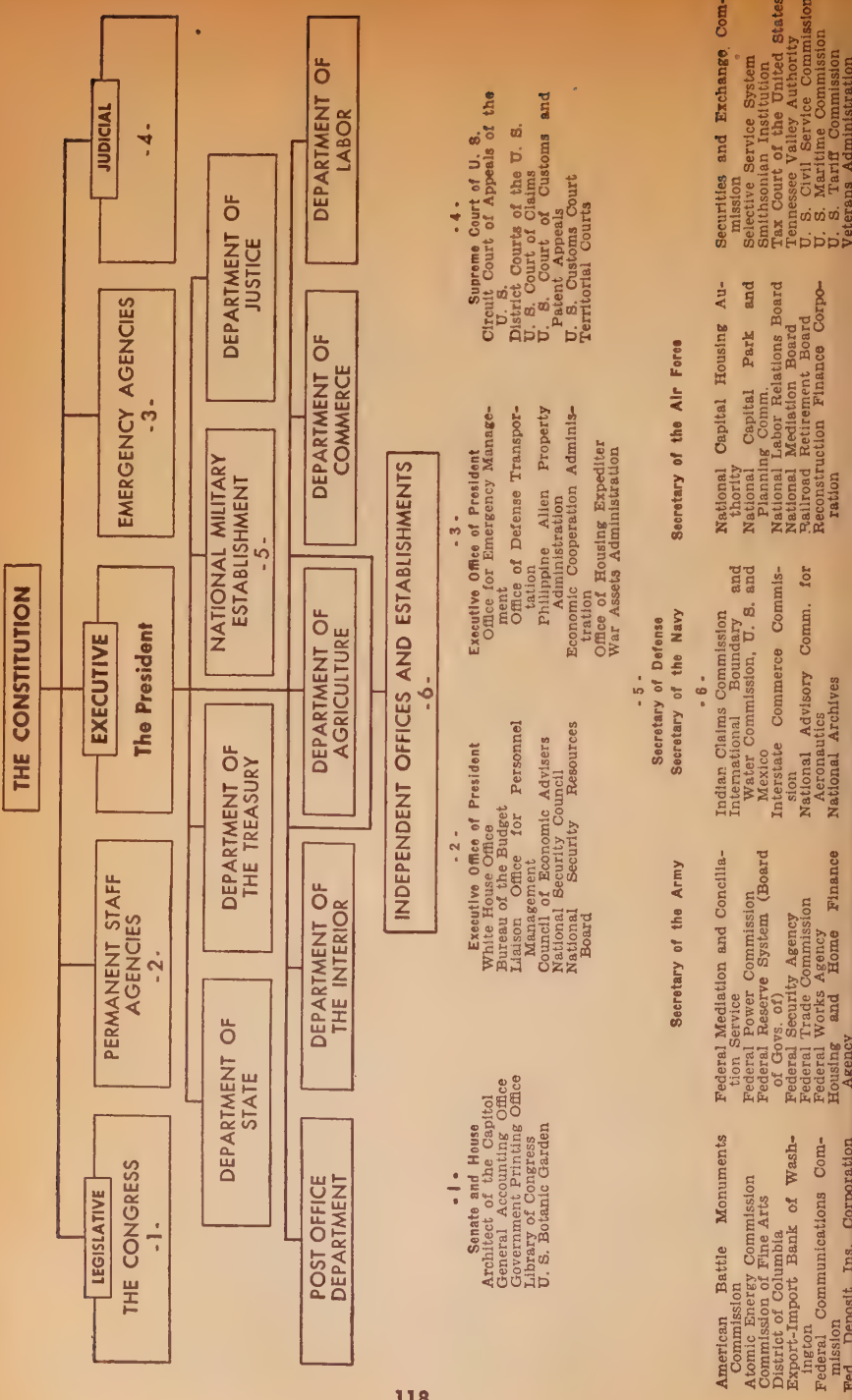
13 Evatt and Lie call on Big Four to hold talks on Berlin situation.

14 Princess Elizabeth gives birth to 7 lb. 6 oz. son who may someday become King of England.

16 U.N. Security Council order armistice throughout Palestine.

DIED: 8—Genevieve Taggard, 54; 11—Fred Niblo, 74; 13—Roark Bradford, 52; 16—Rep. (Mrs.) Florence P. Kahn, 80.

THE GOVERNMENT OF THE UNITED STATES



THE UNITED STATES OF AMERICA



THE DECLARATION OF INDEPENDENCE IN CONGRESS, JULY 4, 1776

The unanimous DECLARATION of the thirteen united STATES OF
AMERICA.

WHEN, in the course of human events, it becomes necessary for one people to dissolve the political bands which have connected them with another, and to assume, among the powers of the earth, the separate and equal station to which the laws of nature and of nature's God entitle them, a decent respect to the opinions of mankind requires that they should declare the causes which impel them to the separation.

We hold these truths to be self-evident that all men are created equal, that they are endowed, by their Creator, with certain unalienable rights, that among these are life, liberty, and the pursuit of happiness. That to secure these rights, governments are instituted among men, deriving their just powers from the consent of the governed, that whenever any form of government becomes destructive of these ends, it is the right of the people to alter or to abolish it, and institute new government, laying its foundation on such principles, and organizing its powers in such form as to them shall seem most likely to effect their safety and happiness. Prudence, indeed, will dictate that governments long established, should not be changed for light and transient causes; and accordingly all experience hath shown that mankind are more disposed to suffer, while evils are sufferable, than to right themselves by abolishing the forms to which they are accustomed. But when a long train of abuses and usurpations, pursuing invariably the same object, evinces a design to reduce them under absolute despotism, it is their right, it is their duty, to throw off such government, and to provide new guards for their future security. Such has been the patient sufferance of these Colonies, and such is now the necessity which constrains them to alter their former systems of government. The history of the present King of Great Britain is a history of repeated injuries and usurpations, all having in direct object the establishment of an absolute tyranny over these States. To prove this, let facts be submitted to a candid world.

He has refused his assent to laws, the most wholesome and necessary for the public good.

He has forbidden his governors to pass laws of immediate and pressing importance, unless suspended in their operation till his assent should be obtained; and when so suspended, he has utterly neglected to attend to them.

He has refused to pass other laws for the accommodation of large districts of people, unless those people would relinquish the right of representation in the legislature, a right inestimable to them, and formidable to tyrants only.

He has called together legislative bodies at places unusual, uncomfortable, and distant from the depository of their public records, for the sole purpose of fatiguing them into compliance with his measures.

He has dissolved representative houses repeatedly, for opposing with manly firmness his invasions on the rights of the people.

He has refused for a long time, after such dissolutions, to cause others to be elected, whereby the legislative powers, incapable of annihilation, have returned to the people at large for their exercise; the State remaining, in the meantime, exposed to all the dangers of invasion from without, and convulsions within.

He has endeavored to prevent the population of these States; for that purpose obstructing the laws for naturalization of foreigners; refusing to pass others to encourage their migrations hither, and raising the conditions of new appropriations of lands.

He has obstructed the administration of justice by refusing his assent to laws for establishing judiciary powers.

He has made judges dependent on his will alone, for the tenure of their offices, and the amount and payment of their salaries.

He has erected a multitude of new offices, and sent hither swarms of officers to harass our people, and eat out their substance.

He has kept among us, in times of peace, standing armies, without the consent of our legislatures.

He has affected to render the military independent of and superior to the civil power.

He has combined with others to subject us to a jurisdiction foreign to our constitution and unacknowledged by our laws; giving his assent to their acts of pretended legislation:

For quartering large bodies of armed troops among us:

For protecting them, by a mock trial, from punishment for any murders which they should commit on the inhabitants of these States:

For cutting off our trade with all parts of the world:

For imposing taxes on us without our consent:

For depriving us, in many cases, of the benefits of trial by jury:

For transporting us beyond seas to be tried for pretended offenses:

For abolishing the free system of English laws in a neighboring province, establishing therein an arbitrary government, and enlarging its boundaries, so as to render it at once an example and fit instrument for introducing the same absolute rule into these colonies:

For taking away our charters, abolishing our most valuable laws, and altering fundamentally the forms of our governments:

For suspending our own legislatures, and declaring themselves invested with power to legislate for us in all cases whatsoever.

He has abdicated government here, by declaring us out of his protection, and waging war against us.

He has plundered our seas, ravaged our coasts, burnt our towns, and destroyed the lives of our people.

He is, at this time, transporting large armies of foreign mercenaries to complete the works of death, desolation, and tyranny, already begun, with circumstances of cruelty and perfidy, scarcely paralleled in the most barbarous ages, and totally unworthy the head of a civilized nation.

He has constrained our fellow citizens, taken captive on the high seas, to bear arms against their country, to become the executioners of their friends and brethren, or to fall themselves by their hands.

He has excited domestic insurrections amongst us, and has endeavored to bring on the inhabitants of our frontiers, the merciless Indian savages, whose known rule of warfare is an undistinguished destruction of all ages, sexes, and conditions.

In every stage of these oppressions we have petitioned for redress in the most humble terms: our repeated petitions have been answered only by repeated injury. A prince whose character is thus marked by every act which may define a tyrant, is unfit to be the ruler of a free people.

Nor have we been wanting in attentions to our British brethren. We have warned them, from time to time, of attempts by their legislature to extend an unwarrantable jurisdiction over us. We have reminded them of the circumstances of our emigration and settlement here. We have appealed to their native justice and magnanimity, and we have conjured them by the ties of our common kindred to disavow these usurpations, which would inevitably interrupt our connections and correspondence. They too have been deaf to the voice of justice and of consanguinity. We must, therefore, acquiesce in the necessity which denounces our separation, and hold them, as we hold the rest of mankind, enemies in war, in peace friends.

WE, therefore, the Representatives of the United States of America, in General Congress assembled, appealing to the Supreme Judge of the world for the rectitude of our intentions, do in the name, and by authority of the good people of these Colonies, solemnly publish and declare, That these United Colonies, are, and of right ought to be, *free and independent States*; that they are absolved from all allegiance to the British crown, and that all political connexion between them and the State of Great Britain, is, and ought to be, totally dissolved; and that as *free and independent States*, they have full power to levy war, conclude peace, contract alliances, establish commerce, and to do all other acts and things which *independent States* may of right do. And for the support of this declaration, with a firm reliance on the protection of Divine Providence, we mutually pledge to each other our lives, our fortunes, and our sacred honour.

JOHN HANCOCK.

New Hampshire.

Josiah Bartlett,
Wm. Whipple,
Matthew Thornton.

Rhode Island.

Step. Hopkins,
William Ellery.

Connecticut.

Roger Sherman,
Sam'l Huntington,
Wm. Williams,
Oliver Wolcott.

New York.

Wm. Floyd,
Phil. Livingston,
Frans. Lewis,
Lewis Morris.

New Jersey.

Richd. Stockton,
Jno. Witherspoon,
Fras. Hopkinson,
John Hart,
Abra. Clark.

Pennsylvania.

Robt. Morris,
Benjamin Rush,
Benja. Franklin,
John Morton,
Geo. Clymer,
Jas. Smith,
Geo. Taylor,
James Wilson,
Geo. Ross.

Massachusetts-Bay.

Saml. Adams,
John Adams,
Robt. Treat Paine,
Elbridge Gerry.

Delaware.

Caesar Rodney,
Geo. Read,
Tho. M'Kean.

Maryland.

Samuel Chase,
Wm. Paca,
Thos. Stone,
Charles Carroll of Carrollton.

Virginia.

George Wythe,
Richard Henry Lee,
Th. Jefferson,
Benja. Harrison,
Ths. Nelson, Jr.,
Francis Lightfoot Lee,
Carter Braxton.

North Carolina.

Wm. Hooper,
Joseph Hewes,
John Penn.

South Carolina.

Edward Rutledge,
Thos. Heyward, Junr.,
Thomas Lynch, Junr.,
Arthur Middleton.

Georgia.

Button Gwinnett,
Lyman Hall,
Geo. Walton.

IN CONGRESS }
JANUARY, 18, 1777. }

Ordered:

That an authenticated copy of the Declaration of Independency, with the names of the Members of Congress subscribing the same, be sent to each of the United States, and that they be desired to have the same put on record.

By order of Congress.

Attest, CHAS. THOMSON,
Secy.

A true copy.
JOHN HANCOCK,
Presidt.

JOHN HANCOCK,
President.

As early as April 12, 1776, the legislature of North Carolina authorized its delegates to the Continental Congress to join with others in a declaration of separation from Great Britain; the first colony to instruct its delegates to take the actual initiative was Virginia on May 15. On June 7, 1776, Richard Henry Lee of Virginia offered a resolution to the Congress to the effect "that these United Colonies are, and of right, ought to be, free and independent States. . . ." A committee, consisting of Thomas Jefferson, John Adams, Benjamin Franklin, Robert R. Livingston and Roger

Sherman was organized to "prepare a declaration to the effect of the said first resolution." The Declaration of Independence was adopted on July 4, 1776.

Most delegates signed the Declaration August 2, but George Wythe (Va.) signed August 27; Richard Henry Lee (Va.), Elbridge Gerry (Mass.) and Oliver Wolcott (Conn.) in September; Matthew Thornton (N. H.), not a delegate until September, in November; and Thomas McKean (Del.), although present on July 4, not until 1781 by special permission, having served in the army in the interim.

THE RISE OF THE UNITED STATES

by ARTHUR M. SCHLESINGER, SR.

1. Under the English Flag

The land now comprehended within the United States once belonged to Spain, France, England, Holland and Sweden. Spain, colonizing from Mexico in the sixteenth and seventeenth centuries, expanded over most of the Gulf Coast, Texas and the border zone westward through California. France, moving down from Canada in the eighteenth century, annexed the Mississippi Valley from the Appalachians to the Rockies. Meanwhile, in the seventeenth century, the English began peopling the Atlantic shore, and finding the Dutch already established in the present New York and the Swedes in Delaware, seized their possessions. The so-called first Americans, the Indians, resisted these encroachments at their peril.

Notwithstanding this varied international background, United States history has been largely the product of influences emanating from the seaboard communities. Unlike the Spanish and French, the English regarded their colonies as genuine extensions of the homeland, and the settlers sowed English customs, institutions and speech so thoroughly that they eventually spread everywhere. True, the transplanted ways underwent modification, but this arose from necessities imposed by a wilderness existence and, as time went on, from a growing sense of self-sufficiency.

Organized settlement began in 1607 at Jamestown, where the first representative assembly was set up in 1619. The Pilgrims followed at Plymouth in 1620, spearheading a much larger migration of Puritans into New England. Later in the century the Quakers occupied a midway region owned by William Penn, making Philadelphia their headquarters and fanning out in every direction. By 1700 all the thirteen colonies existed but the southernmost, Georgia, which came into being in 1733. The settlers crossed the ocean to escape economic, religious and political oppression and to start anew in a land of greater opportunity.

In time, other strains reinforced the original English population: French Huguenots, Scotch Irish, Germans and minor groups, including the Dutch and Swedes already on hand. African slaves, first introduced at Jamestown in 1619, were welcomed in all the colonies, though the economic need for them was greater in the South, and the system took deeper root there than elsewhere. The people in the North engaged mainly in small farming, fishing and commerce, the Southerners largely in plantation production. Everywhere the colonists practiced self-government. When they clashed with the English-

appointed governors, they usually won out by withholding appropriations.

As the population penetrated farther inland, the settlers encountered the French guarding Canada and the eastern fringes of the Mississippi Valley. In a succession of wars (1689-1763), paralleling greater struggles between the parent nations abroad, France was finally ejected from North America and Britain's dominion extended to the Mississippi. Spain fell heir to the country west of the river, though some years later Napoleon was temporarily to reclaim it for France.

2. Birth of the Nation

With the removal of the Gallic menace the colonists felt less dependent upon the mother country militarily, and England's change from her former policy of "salutary neglect" aroused active resentment. A series of revenue measures, starting with the Sugar Act of 1764, provoked meetings of protest, nonimportation pacts and mob demonstrations in America. Colonial home rule was at stake, also freedom of trade, and the provincials appealed to the principle: "No taxation without representation." Parliament's action in 1774 penalizing all Massachusetts for the deed of a few in dumping dutied tea into Boston Harbor led to the first armed clash at Concord and Lexington on April 19, 1775; but a year and more passed before the patriots resolved upon the hazardous step of independence. The famous Declaration of July 4, 1776, penned by Thomas Jefferson for the Second Continental Congress, justified revolution as the only means to guarantee the "unalienable Rights" of "Life, Liberty and the pursuit of Happiness." Under George Washington as commander in chief the fighting shifted from New England into the middle states and then into the south. General Gates's victory at Saratoga on October 17, 1777, brought England's ancient enemy, France, into the war; just four years later the British yielded to the Allies at Yorktown. The Peace Treaty in 1783 recognized the United States as stretching to the Mississippi.

The infant, though born and baptized, had yet to be weaned. The league of states, formed under the Articles of Confederation in 1781, proved too weak either to deal effectively with foreign countries, or to raise necessary funds, or to ensure unrestricted domestic trade. Within the states, however, Revolutionary idealism prompted action to forbid primogeniture and tax-supported religions, and the Northern commonwealths abolished slavery, a prohibition which Congress's Ordinance of 1787 extended to the territory north of the Ohio. Feebleness of government, combined

with social disturbances culminating in Shays's Rebellion in Massachusetts, made sober men tremble for the sanctity of property rights and seemed to cloud the nation's future. The Federal Convention, summoned in 1787, designed a new framework after much wrangling between rival interests and sections.

The Constitution established a government of three separate and coordinate departments—legislative, executive and judicial—each endowed with adequate power, and each to serve as a check and balance on the others. Within its own sphere the general government was supreme, and it exerted its will not through state officials, as under the Articles of Confederation, but immediately upon individuals. Direct popular representation was limited to the House of Representatives, the Senate being chosen by the legislatures (a system which lasted till 1913), the President designated by Electors (who in practice, however, quickly lost their deliberative function), and the Supreme Court appointed by the President and Senate for life. Opposed in many states because of its centralizing and undemocratic features, the Constitution eventually won adoption on the assurance that a bill of rights would be added to preclude federal interference with civil liberties such as freedom of speech, the press and religion. The first ten amendments, in 1791, fulfilled the promise.

Perhaps no convention would have ratified the Constitution if it had been realized that an indivisible Union would ensue. The framers, engaged in the practical task of curing the defects of the Confederation government, strewed phrases through the document that had contradictory implications. On the basis of the text it was possible for equally honest men to maintain that the states were more powerful than the nation, or that the nation overtopped the states. At one time or other nearly every legislature, given what it considered sufficient provocation, asserted the right of nullification or secession. Short of such extreme doctrines, controversy began almost immediately over the question of whether the Constitution should be construed broadly to enhance the national authority or narrowly to lessen it.

Under George Washington, President from 1789 to 1797, the new government became a going concern. Congress, guided by Secretary of the Treasury Alexander Hamilton, buttressed the public credit by arranging to pay at par the national debt and the war-incurred state debts and by creating a United States Bank modeled upon the Bank of England. These measures, especially the last, alarmed Jefferson, veteran liberal and Washington's Secretary of State. Fearing that the legislation would build up a dangerous moneyed class, he urged a strict interpretation of the Con-

stitution in opposition to Hamilton's loose-construction views. The French Revolution widened the breach, for the Jeffersonian Democrats applauded as an upsurge of liberty what the Federalists dreaded as an irruption of chaos. But both men, knowing America's defenseless state, backed Washington's decision to maintain neutrality in France's war with England. Returned to power under John Adams, the Federalists in 1798, however, declared naval hostilities against France and passed the Alien and Sedition Acts to muzzle opposition criticism. Though Adams, defying his party, prevented a full-scale war, he lost the election of 1800 to Jefferson. The Federalists never saw office again.

3. Democracy and Nationalism

The farming interest, which Jefferson deemed the bulwark of free government, had steadily increased since the Revolution. As settlers trekked inland, new states joined the original thirteen: Vermont, Kentucky and Tennessee in the 1790's, with Ohio and others shortly to follow. Western pioneer life begot an intense individualism, fostered political and economic democracy, stimulated nationalism. In the South, by contrast, Eli Whitney's invention of the cotton gin in 1793 opened the way for plantation agriculture and Negro slavery to expand westward beyond the Mississippi. The growth of manufacturing in the Northeast introduced a third element into the scene. The rivalries of these sectional forces wove the principal strands of American history until the Civil War. Toward the mid-century the situation was further confused by the spread of manhood suffrage and a sudden mass immigration from Ireland and Germany.

Jefferson inaugurated the "Virginia Dynasty," his eight years giving way to two terms each of James Madison and James Monroe. He performed his greatest service by purchasing Louisiana from Napoleon in 1803, an act which, though violating his constitutional scruples, carried the flag to the Rockies and vastly enlarged the agricultural domain. With France and England again locked in conflict, depredations on American commerce gave constant provocation to war, but the peace-loving Jefferson applied economic sanctions in the form of an embargo keeping merchantmen at home. Such measures failed, however, and under Madison in 1812 Congress, goaded by the Warhawks, mostly Westerners, declared war on England. Unlike France, she had compounded her offenses by impressing American sailors and, moreover, lay exposed to land attack in Canada. But the assaults on Canada miscarried, and Britain's attempts at counter-invasion with veterans freed by Napoleon's defeat in 1814 fared little better.

Unhappily, Andrew Jackson's victory at New Orleans on January 8, 1815, occurred two weeks too late to affect the Peace Treaty of Ghent, which settled none of the prewar disputes.

Nevertheless the war experience greatly accelerated American nationalism. In 1816 Congress enacted the first protective tariff and chartered a new United States Bank on the model of Hamilton's. In 1819 the country acquired the Gulf region from Spain, who chose to sell rather than have it seized. In 1823 the President, prompted by successful revolutions in Latin America, proclaimed the Monroe Doctrine, warning Europe to keep hands off this new area of freedom.

Other events, however, prefigured growing sectional discord. Opposition to admitting Missouri as a slave state was ended in 1820 only by Congress's agreeing that the rest of the Louisiana Purchase north of the parallel marking her southern boundary should be free soil. Successive tariffs alienated Southerners as class legislation discriminating against their welfare. Touted by the astute South Carolinian, John C. Calhoun, they refurbished the doctrine of state rights as defensive armor. John Quincy Adams's administration (1825-1829) did nothing to improve conditions, and the advent of his successor, Jackson, precipitated a crisis.

Old Hickory, as indomitable in peace as in war, acted boldly against divisive tendencies, whether from the slavocracy or the money power. When South Carolina nullified the Tariff of 1832, he prepared for military action, whereupon the state accepted Congress's olive branch of a lower scale of duties. He smote financial privilege by destroying the Second United States Bank, which wielded monopolistic control over the nation's credit facilities. After eight years Jackson's lieutenant, Martin Van Buren, took over, but a business depression following the Panic of 1837 so discredited his administration that in 1840 the Whigs uproariously elected William Henry Harrison in the famous log-cabin campaign. He died after a month in office, however, and the Whigs fared hardly better with his unintended successor, John Tyler, whose strict-constructionist predilections foiled their plan to establish a third national bank.

Within the free states these years witnessed a ceaseless ferment of humanitarian agitation: crusades for public education, temperance, prison reform, labor's rights, women's rights. Humane people, viewing slavery as an anachronism and a sin, formed organizations to urge its abolition. The moderate-minded, content with demanding its exclusion from the territories, founded a series of unsuccessful parties, beginning with the election of 1840. The

South, frightened by these threats to its cherished institution, found little good in any of the movements and regarded the restless North with mounting apprehension.

4. Sectional Conflict

Western expansionist zeal plus the Southern desire for more slave territory elected James K. Polk over his Whig rival, Henry Clay, in 1844. When the outgoing Congress executed the Democratic pledge to annex Texas, Polk proceeded to high-pressure England into partitioning the jointly held Oregon country at the forty-ninth parallel, and in 1846, while that was still under way, contrived a war with Mexico to acquire California and the territory eastward to Texas. American forces quickly overran northern Mexico and California, but a fiercely contested march from Veracruz through the mountains to Mexico City proved necessary before Polk achieved his goal in the Treaty of Guadalupe Hidalgo early in 1848.

The conquests approximately completed the present continental boundaries. The immediate effect, however, was to arouse sectional dissension over the question of slavery in the new Southwest. Zachary Taylor, elected by the Whigs in 1848, died in office after sixteen months, leaving the crisis in the lap of Millard Fillmore. The Compromise of 1850, piloted through Congress by Henry Clay, admitted California as a free state, left slavery in Utah and New Mexico territories to future judicial determination, and disposed of other disputes. But the settlement soon turned into unsettlement, for Fillmore's Democratic successors, Franklin Pierce and James Buchanan, supported pro-Southern policies.

The Kansas-Nebraska Act of 1854, authorizing slavery by "popular sovereignty" in the country just west of Missouri and Iowa, outraged Northerners as a base repudiation of the historic Missouri Compromise. Guerrilla warfare followed in Kansas, while in the free states the old-time antislavery elements joined with dissident Whigs and Democrats to organize the Republican party. The Republicans insisted that slavery be kept out of all federal territories. Angry contests on the floors of Congress operated like a war of nerves convincing each side that the other was plotting its ruin. John Brown's insane attempt in 1859 to incite a servile insurrection merely poured oil on the flames. When the Republicans in 1860 elected Abraham Lincoln over a divided Democratic opposition, eleven slave states, appealing to state-rights principles, seceded and established the Confederate States of America.

For the hostilities that ensued, the North possessed the long-run advantage.

of superior economic resources and manpower, but before these could come into play, the South hoped to win by military prowess and perhaps by the intervention of England, which needed Southern cotton. England, however, never went quite so far, and the Southern authorities failed also to reckon with the inspired leadership of President Lincoln, who taught his people that the preservation of the Union involved not only their country's future but the democratic hope everywhere. While the North went about establishing a blockade by sea, the Confederates under Robert E. Lee brilliantly repulsed repeated land attacks on their capital, Richmond, and countered with battles on Northern soil at Antietam in 1862 and Gettysburg in 1863. But in the west they steadily lost ground until the Union forces late in 1864 swept around the southern tip of the mountains into Lee's rear and, by a piners movement with Ulysses S. Grant before Richmond, brought final defeat the following April. As soon as military fortunes favored, Lincoln under his war powers proclaimed the emancipation of slaves in all unconquered states and districts, and the Thirteenth Amendment in 1865 universalized the decree. America at long last had caught up with the preamble of the Declaration of Independence.

Even prior to his re-election in 1864, Lincoln "with malice toward none" announced a plan to ease the return of the Southern states to their former place in the Union; but before much could be accomplished, his assassination in April, 1865, brought into office Andrew Johnson, who shared his views of reconstruction without his gifts of persuasion. Over Johnson's vetoes the radical Republicans adopted a punitive program. They imposed military rule upon the South, impeached and almost ousted the President, and exacted ratification of the Fourteenth and Fifteenth Amendments before readmitting the last states in 1870. These amendments were designed to make the freedman a full-fledged citizen and voter. Even so, federal payonets kept Northern-controlled carpet-bag governments in power for several years more.

5. Business and Government

Already the Republicans were changing from a humanitarian party to one of conservative business. The war gave an immense stimulus to economic life, speeding the construction of railways, the exploitation of minerals and other resources, the development of large-scale manufacturing, the accumulation of wealth, and bringing to the fore great captains of industry and finance, who naturally turned for favors to the dominant party. Despite economic depressions after the Panics of 1873 and 1893, this alliance of business and politics

governed the country almost uninterrupted for the rest of the century, putting successively into office Grant (for eight years), Rutherford B. Hayes, James A. Garfield, Chester A. Arthur (for Garfield's unexpired term), Benjamin Harrison and William McKinley (for two terms).

In the Hayes-Tilden election of 1876, however, the Republicans nearly came to grief, partly because of revelations of widespread graft in Grant's second administration, and partly because of disputed electoral returns from the surviving carpetbag states. A special commission, created by Congress, decided for Hayes by a strictly partisan vote. The Democrats actually won eight years later, the voters preferring Grover Cleveland to James G. Blaine, whom they suspected of political corruption. Cleveland, though defeated in 1888, triumphed again in 1892 largely because the Republicans had claimed too much for the beneficence of tariff protection. The Republicans avoided other disasters by harping upon Democratic disloyalty during the Civil War ("waving the bloody shirt") and by catering to the Northern veterans' vote with generous pensions.

Conservative Republicanism met its principal difficulties in Congress, where the Western members, supported usually by Southern Democrats, uneasily resisted capitalistic domination. The Farther West, peopling rapidly after the war, gave a fresh dimension to the nation. Thanks to the attractions of precious minerals, cattle raising and free homesteads, this last frontier yielded steadily to settled communities, and between 1876 and 1896 eight additional states entered the Union. A new sectionalism emerged in politics, for Western needs and aspirations differed at many points from those of the East. The wage earners, too, feared the growing power of Big Business, but despite mounting numbers they lacked political representation and hence concentrated on trade-union methods, forming the American Federation of Labor in 1881. The two depression periods produced violent strikes and upheavals. Labor, however, prevailed upon Congress to place restraints on immigration in order to discourage competition by underpaid workers, especially from Southern and Eastern Europe.

Legislative struggles nearly always pivoted on issues affecting the new industrial order. The problem of greenback inflation, arising from the war, was finally settled to Eastern satisfaction by the Resumption Act of 1875. The drive for higher and yet higher protection succeeded with occasional reverses until the Dingley Tariff in 1897 set a record. Congress under Western pressure took ineffective steps in 1887 and 1890 to regulate railways and business combinations, and it made some early concessions also to the Western de-

mand for free silver. During the Panic of 1893, however, Cleveland induced Congress to stop the inflation; and after the silverites, capturing the Democratic convention in 1896, failed to elect their nominee, William Jennings Bryan, the Republicans reduced silver to a minor coin and committed the country to the gold standard.

Foreign relations reflected similar tendencies, for the expanding industrial system demanded new markets, openings for investment and sources of raw materials. Cleveland withstood imperialistic sentiment, and in 1898 the McKinley administration intervened in the Cuban insurrection under the whip of popular anger at Spanish methods of repression and the explosion of the battleship *Maine* in Havana Harbor. Spain was quickly routed not only in the West Indies but also in her possessions off Asia. Though the "splendid little war" was prompted less by Wall Street than by a superheated sensational press, it bore fruit in the annexation of Puerto Rico, the Philippines and Guam, and brought businessmen further advantages through the quasi protectorate imposed on Cuba (later extended to other Caribbean countries). About the same time Hawaii and American Samoa were acquired, and Secretary of State John Hay's "open door" policy promised a growing trade with China. Theodore Roosevelt, raised to the presidency by McKinley's assassination in September, 1901, further advanced the cause by abetting a revolution against Colombia, thereby assuring the construction of the Panama Canal and much shorter distances within the colonial empire.

In domestic politics, however, Roosevelt aligned himself with the rising sentiment against business-dominated government, preaching with gusto the doctrine of the "square deal," and in his seven years breaking ground for later and more substantial advances. Despite party reactionaries he put teeth into the enforcement of the Antitrust Act of 1890, bullied Congress into tightening control over railroads and industrial monopolies, and initiated measures for conserving the nation's natural resources. William Howard Taft, his choice as successor, quietly pursued similar policies; but Taft's endorsement of the steep Payne-Aldrich Tariff together with other missteps so embittered the reformers that, failing to prevent his renomination in 1912, they organized the Progressive party to run their idol "Teddy" again. The Democrats, facing a divided opposition, elected their candidate, Woodrow Wilson.

Superbly endowed intellectually, and gifted with Jefferson's power to express Democratic aspirations, Wilson proceeded with magisterial authority to climax the earlier efforts at reform. The Underwood Tariff enacted the lowest rates since the

Civil War; the Federal Reserve Act superseded an outworn national banking system; and the Clayton Act created the Federal Trade Commission to stop "unfair methods of competition." Two other measures, launched by popular demand during World War I, involved changes in the Constitution. The Eighteenth Amendment in 1920 enacted national prohibition, which ran its stormy course in thirteen years and required the Twenty-first for its undoing. The Nineteenth Amendment (1920) extended to all women the suffrage which in some states they already possessed.

6. World War and After

With America a neutral in 1914 when the European struggle began, the administration's chief energies turned to the protection of maritime rights. Wilson and his countrymen, hating war and traditionally isolationist, only gradually perceived the threat to national security if a militaristic Germany should supplant Britain as mistress of the Atlantic; but Berlin's revival of ruthless submarine operations a few months after Wilson's second election clarified men's minds. Congress, stirred by his appeal that "The world must be made safe for democracy," declared war on April 6, 1917. The government, racing against time, swiftly put the nation on battle footing, enacting universal conscription, taking over the railways, and regimenting industry, labor and agriculture. It was the country's introduction to total war. In the summer of 1918 Yankee troops under General John J. Pershing helped repulse a great German drive on the Marne and in September shared in the mighty Meuse-Argonne counteroffensive which ended the struggle on November 11.

At the Paris Peace Conference, Wilson fought stubbornly for the democratic settlement he had earlier outlined under Fourteen Points, but gained principally his proposal of a League of Nations, which he saw as a sort of continuing peace conference. At home the Republican-controlled Senate, whipping up isolationist sentiment, completed his rout, for when Wilson spurned efforts to amend the treaty, the body under the two-thirds requirement rejected it by a minority vote. The tide was turning from wartime idealism to what Warren G. Harding, overwhelmingly elected by the Republicans in 1920, called "normalcy." Disclosures of corruption in high government circles hastened Harding's death, elevating Calvin Coolidge, who renewed his presidency by election a year later and was followed in 1929 by Herbert Hoover. All three, while keeping out of the League, nevertheless cooperated with some of its minor activities and, on their own, concluded a number of collective treaties for temporary naval disarmament and the outlawry of war.

These part-way steps were offset, however, by an upsurge of economic nationalism: a skyward trend of protective duties, relaxing of controls over giant corporations, and a quota limitation on European immigration. "Rugged individualism" produced the dizziest prosperity the country had ever known, only to collapse in 1929 into the worst depression ever known. Hoover, striving vainly to repair the damage, met abject defeat in 1932 at the hands of the socially minded Franklin D. Roosevelt, who pledged a "new deal" by the Democrats. Under Roosevelt's thrilling leadership Congress, casting precedent to the winds, voted billions for relief, "primed the pump" of business and agriculture to hasten recovery, and inaugurated long-range reforms to increase foreign trade through reciprocal tariff reductions, reorganize banking practices, safeguard trade-union activities, guarantee minimum wages, destroy electrical holding companies, and provide for social insurance and a government-planned development of the Tennessee Valley.

7. World War Again

Toward Latin America Franklin Roosevelt adopted the "good neighbor" policy, relinquishing the Caribbean protectorates and transforming the Monroe Doctrine into a mutual nonaggression pact. As further evidence of the retreat from imperialism, Congress made provision for Philippine freedom in 1946. Relations with other parts of the world, however, posed increasing problems. As the Axis dictators and their Oriental partner, Japan, began overunning weaker peoples, Congress under isolationist influences directed Roosevelt, against his wish, to embargo munition sales to both victim and assailant; but public opinion forced a lifting of the ban after England and France in September, 1939, took up arms against Nazi aggression. Hitler's subjugation of France the following June emboldened Roosevelt to more active steps, for crippled England now alone defended the Atlantic from totalitarian domination. Congress at his behest voted vast sums for rearmament and adopted peace-time conscription, and Roosevelt, without consulting Congress, gave England fifty destroyers in exchange for a string of naval bases off North America.

Isolationists, mostly Republicans, denounced Roosevelt's "warmongering," while he, still clinging to measures "short of war," stressed insistently the gathering dangers to the American way of life—freedom of speech, freedom of worship, freedom from want and freedom from fear. The people responded by choosing him in 1940 as their first third-term President. In March, 1941, he secured adoption of the lend-lease plan and soon began using the navy to safeguard the supplies en route.

Before matters reached a crisis, the Japanese war lords, irked by America's stiffening attitude toward their own conquests and gambling upon an Axis victory in Europe, treacherously attacked Pearl Harbor on December 7, clearing the way for the seizure of Guam, the Philippines and two of the Aleutians, as well as many Dutch and British holdings. Within four days Germany and Italy declared war against the United States.

America quickly girded herself for the mightiest struggle in history. Enlarging upon Wilson's wartime methods, the government completely reorganized the national economy for an unparalleled output of arms and food. By summer, sea, land and air forces were attacking the enemy all over the globe. In May, 1943, after bitter fighting, Anglo-American armies expelled the Axis from North Africa, then invaded southern Italy and forced the government's submission in September, though the Nazis there kept up the fight. Landing in Normandy in June, 1944, the Allies under Dwight D. Eisenhower's supreme command battered their way through France and across the Rhine, while the Russians pounded the Nazis from the east. On May 7, 1945, Germany unconditionally surrendered. The Pacific war was no less desperately contested; but the Allies, based on Australia, slowly won control of the sea and, pressing onward from island to island, hastened Japan's unconditional surrender on August 14, 1945, by loosing the atomic bomb and by Soviet Russia's last-minute entry into the conflict.

World War II was at an end, but what would be the nature of the peace? The Atlantic Charter, signed in August, 1941, by Roosevelt and Churchill and later agreed to by all the Allies, pledged them against "aggrandizement, territorial or other," but subsequent conferences by the major powers—at Cairo, Teheran, Yalta, Potsdam and elsewhere—foreshadowed a different outcome. Russia in particular demanded substantial territorial advantages. In July, 1946, the Allies gathered at Paris to draw up terms for Italy and the Axis satellites: Rumania, Bulgaria, Hungary and Finland. Germany and Japan, under armed occupation, were reserved for later handling.

Without waiting for final military victory fifty countries, at Roosevelt's urging and with bipartisan support in America, had set up a successor to the League: the peacetime United Nations. Roosevelt, elected a fourth time in 1944, died suddenly on April 12, 1945, several weeks too soon to assist in framing the charter at San Francisco; but his achievements in peace and war had already earned him a niche alongside America's greatest Presidents: Washington, Jefferson, Jackson, Lincoln and Wilson.

The Mayflower Compact

On September 6, 1620, the *Mayflower*, a sailing vessel of about 180 tons, started her memorable voyage from Plymouth, England with 100 or 102* pilgrims aboard, bound for Virginia to establish a private permanent colony in North America. Arriving at Provincetown, Mass., on November 11 (November 21, new style calendar),

forty-one of the passengers signed the famous "Mayflower Compact" as the boat lay at anchor in that Cape Cod harbor. A small detail of the Pilgrims, led by William Bradford, assigned to select a place for permanent settlement landed at what is now Plymouth, Mass., on December 21, 1620. The text of the compact follows:

IN THE NAME OF GOD, Amen. We, whose names are underwritten, the Loyal Subjects of our dread Sovereign Lord, King *James*, by the Grace of God, of *Great Britain, France and Ireland*, King, *Defender of the Faith*, &

Having undertaken for the Glory of God, and Advancement of the Christian Faith, and the Honour of our King and Country, a voyage to plant the first colony in the northern Parts of Virginia; do by these Presents, solemnly and mutually in the Presence of God and one of another, covenant and combine ourselves together into a civil Body Politick, for our better Ordering and Preservation, and Furtherance of the Ends aforesaid; And by Virtue hereof to enact, constitute, and frame, such just and equal Laws, Ordinances, Acts, Constitutions and Offices, from time to time, as shall be thought most meet and convenient for the General good of the Colony; unto which we promise all due Submission and Obedience.

In WITNESS whereof we have hereunto subscribed our names at *Cape Cod* the eleventh of *November*, in the Reign of our Sovereign Lord, King *James of England, France and Ireland*, the eighteenth, and of *Scotland* the fifty-fourth. *Anno Domini*, 1620

John Carver
Digery Priest
William Brewster
Edmund Margesson
John Alden
George Soule
James Chilton
Francis Cooke
Josias Fletcher
John Ridgate
Christopher Martin

William Mullins
Thomas English
John Howland
Stephen Hopkins
Edward Winslow
Gilbert Winslow
Miles Standish
Richard Bitteridge
Francis Eaton
John Tilly
John Billington

Thomas Tinker
Samuel Fuller
Richard Clark
John Allerton
Richard Warren
Edward Lester
William Bradford
Thomas Williams
Isaac Allerton
Peter Brown
John Turner

Edward Tilly
John Craxton
Thomas Rogers
John Goodman
Edward Fuller
Richard Gardin
William White
Edward Doten

*Historians differ as to whether 100, 101, or 102 passengers were aboard.

The Early Congresses

At the urging of Massachusetts and Virginia, the First Continental Congress met in Philadelphia on September 5, 1774, and was attended by representatives of all the colonies except Georgia. Patrick Henry of Virginia declared: "The distinctions between Pennsylvanians, New Yorkers and New Englanders are no more. I am not a Virginian but an American." This Congress, which adjourned October 26, 1774, passed intercolonial resolutions calling for extensive boycott by the colonies against British trade.

The following year, most of the delegates from the colonies were chosen by popular election to attend the Second Continental Congress, which assembled in Philadelphia on May 10. As war had already begun between the colonies and England, the chief problems before the Congress were the procuring of military supplies, the establishment of an army and proper defenses, the issuing of continental bills of credit, etc. On June 15, 1775, George Washington

was elected to command the Continental army. Congress adjourned Dec. 12, 1776.

Other Continental Congresses were held in Baltimore (1776-77), Philadelphia (1777), Lancaster, Pa. (1777), York, Pa. (1777-78) and Philadelphia (1778-81).

In 1781, the Articles of Confederation, although establishing a league of thirteen states rather than a strong central government, provided for the continuance of Congress. Known thereafter as the Congress of the Confederation, it held sessions in Philadelphia (1781-83), Princeton, N. J. (1783), Annapolis, Md. (1783-84) and Trenton, N. J. (1784). Five sessions were held in New York City between the years 1785 and 1789.

The Congress of the United States, established by the ratification of the Constitution, held its first meeting on Mar. 4, 1789, in N. Y. C. Several sessions of Congress were held in Philadelphia, and the first meeting in Washington, D. C., was on Nov. 17, 1800.

Presidents of the Continental Congresses

Name	Elected	Born	Died
Peyton Randolph, Va.	Sept. 5, 1774	c.1721	1775
Henry Middleton, S. C.	Oct. 22, 1774	1717	1784
Peyton Randolph, Va.	May. 10, 1775	c.1721	1775
John Hancock, Mass.	May 24, 1775	1737	1793
Henry Laurens, S. C.	Nov. 1, 1777	1724	1792
John Jay, N. Y.	Dec. 10, 1778	1745	1829
Samuel Huntington, Conn.	Sept. 28, 1779	1731	1796
Thomas McKean, Del.	July 10, 1781	1734	1817
John Hanson, Md.	Nov. 5, 1781	1715	1783
Elias Boudinot, N. J.	Nov. 4, 1782	1740	1821
Thomas Mifflin, Pa.	Nov. 3, 1783	1744	1800
Richard Henry Lee, Va.	Nov. 30, 1784	1732	1794
John Hancock, Mass.*	Nov. 23, 1785	1737	1783
Nathaniel Gorham, Mass.	June 6, 1786	1738	1796
Arthur St. Clair, Pa.	Feb. 2, 1787	1734	1818
Cyrus Griffin, Va.	Jan. 22, 1788	1748	1810

*Resigned May 29, 1786, never having served, because of continued illness.

The Star-Spangled Banner

Francis Scott Key, 1814

O say, can you see, by the dawn's early light,
What so proudly we hail'd at the twilight's last gleaming?
Whose broad stripes and bright stars, thro' the perilous fight,
O'er the ramparts we watch'd, were so gallantly streaming?
And the rockets' red glare, the bombs bursting in air,
Gave proof thro' the night that our flag was still there.
O say, does that star-spangled banner yet wave
O'er the land of the free and the home of the brave?

On the shore dimly seen thro' the mists of the deep,
Where the foe's haughty host in dread silence reposes,
What is that which the breeze, o'er the towering steep,
As it fitfully blows, half conceals, half discloses?
Now it catches the gleam of the morning's first beam,
In full glory reflected, now shines on the stream:
'T is the star-spangled banner: O, long may it wave
O'er the land of the free and the home of the brave!

And where is that band who so vauntingly swore
That the havoc of war and the battle's confusion,
A home and a country should leave us no more?
Their blood has wash'd out their foul footsteps' pollution.
No refuge could save the hireling and slave
From the terror of flight or the gloom of the grave:
And the star-spangled banner in triumph doth wave
O'er the land of the free and the home of the brave.

O thus be it ever when free-men shall stand
Between their lov'd home and the war's desolation;
Blest with vict'ry and peace, may the heav'n-rescued land
Praise the pow'r that hath made and preserv'd us a nation!
Then conquer we must, when our cause it is just,
And this be our motto: "In God is our trust!"
And the star-spangled banner in triumph shall wave
O'er the land of the free and the home of the brave!

ON SEPTEMBER 13, 1814, Francis Scott Key visited the British fleet in Chesapeake Bay to secure the release of Dr. William Beanes, who had been captured after the burning of Washington, D. C. The release was secured, but Key was detained on ship overnight during the shelling of Fort McHenry, one of the forts defending Baltimore. In the morning, he was so delighted to see the American flag still flying over the fort that he began a poem to commemorate the occasion. Entitled "The Star-Spangled Banner," the poem soon attained wide popularity as sung to the tune "Anacreon in Heaven." The origin of this tune is obscure, but it may have been written by John Stafford Smith, a British composer born in 1750. "The Star-Spangled Banner" was officially made the National Anthem by Congress in 1931, although already adopted as such by the Army and Navy.

HOW A PRESIDENT IS ELECTED

Selection of Delegates

NOT A WORD APPEARS IN THE CONSTITUTION about nominating a candidate for President, but hardly has one Chief Executive been inaugurated before the country begins its great national guessing game—who are likely to be the candidates by the time of the next presidential election?

Actually the eventual choice of a candidate involves ponderous machinery. First, at full dress meetings some months before, the national committees decide the time and place of the conventions. Before the conventions meet each party selects delegates from every state and territory.

The Democrats allow each state twice as many delegates as the state has senators and representatives; the party has allowed four additional delegates from each state that went Democratic in the election of 1944. The Democrats also allow six delegates each to Puerto Rico, the District of Columbia, Alaska, Hawaii and the Canal Zone and two to the Virgin Islands.

The Republicans allot each state four delegates-at-large and two each for each Representative-at-large, as well as three additional delegates if the state went Republican in the previous presidential or senatorial election. In addition, each congressional district within the state that cast 1,000 Republican votes at the last election is permitted a delegate, with an additional delegate if that district cast 10,000 votes. The Republicans further allot two delegates to Puerto Rico and three to the District of Columbia; Alaska and Hawaii also get three delegates plus two if the territorial delegate to Congress is Republican.

Each party provides for the selection of an equal number of alternates to serve in the absence of regular delegates. Delegates are chosen differently in different states, mostly by party primary but in some cases by party conventions.

The Conventions

At each convention a temporary chairman is chosen, usually to deliver the party's keynote speech. After a credentials committee seats the various delegates, a permanent chairman is elected. The convention then votes on a platform, drawn up by the platform committee.

By the third or fourth day, presidential nominations begin. The chairman calls the roll of states alphabetically. A state may place a candidate in nomination or yield to another state.

Voting, again alphabetically by voice

vote, begins after all nominations have been made and seconded. A simple majority is required in each party, although this may require many ballots. Then, the vice presidential candidate is selected; he must come from a different state, since electors must vote for a President or a Vice President (either one) not a resident of his own state. A President and Vice President must not come from one state.

The Electoral College

The next step in the process is the nomination of electors in each state, according to its laws. These electors must not be federal office holders. In the November election, the voters cast their votes for electors, not for President. In some states the ballots include only the names of the presidential and vice presidential candidates; in others, they include only names of the electors. Nowadays, it is practically impossible for electors to be split between parties. It last occurred in West Virginia in 1916. On several occasions, the candidate with the largest popular vote nationally failed to obtain the necessary majority of the electoral vote.

Each state has as many electors as it has United States Senators and members of the House of Representatives. There are 96 Senators and 435 Representatives, a total of 531 electoral votes, of which 266 are needed to win.

On the first Monday after the second Wednesday in December, the electors cast their votes in their respective state capitals. Constitutionally they may vote for someone other than the party candidate, but practically they cannot since they are pledged to one party and its candidate on the ballot. Should the presidential or vice presidential candidate die during the interval between the November popular vote and the December meetings, new choices may be made to fill the tickets by the national committees or by convention called by them. The votes of the electors, certified by the states, are sent to Congress where the President of the Senate opens the certificates and has them counted in the presence of both Houses in January. The new President is inaugurated at noon on January 20.

Should no candidate receive a majority of the electoral vote for President, the House of Representatives chooses a President from among the three highest candidates, voting, not as individuals, but states, with a majority (now 25) needed to elect. Should no vice presidential candidate obtain the majority, the Senate, voting as individuals, chooses from the highest two.

Presidential Elections, 1789 to 1948

The Constitution does not provide for the popular election of either the President or Vice President. It merely states that they shall be chosen by electors who shall be chosen in a manner prescribed by the state legislatures. No set of popular vote returns is complete or entirely significant until 1872, because that was the first election in which all electors were chosen by popular vote. By referring to the returns in 1876 and 1888, it can be seen that the candidate with the greatest popular vote is not necessarily elected.

Year	Presidential candidates	Party	Electoral vote	Year	Presidential candidates	Party	Electoral vote
1789 ^{1,2}	George Washington	(no party)	69	1796 ¹	John Adams	Federalist	71
	John Adams	(no party)	34		Thomas Jefferson	Dem.-Rep.	68
	Scattering	(no party)	35		Thomas Pinckney	Federalist	59
	Votes not cast		8		Aaron Burr	Dem.-Rep.	30
1792 ¹	George Washington	Federalist	132	1800 ^{1,8}	Scattering		48
	John Adams	Federalist	77		Thomas Jefferson	Dem.-Rep.	73
	George Clinton	Anti-Federalist	50		Aaron Burr	Dem.-Rep.	73
	Thomas Jefferson	Anti-Federalist	4		John Adams	Federalist	65
	Aaron Burr	Anti-Federalist	1		Charles C. Pinckney	Federalist	64
	Votes not cast		6		John Jay	Federalist	1

¹For the original method of electing the President and the Vice President, see Article II, Section 1, of the Constitution. ²Only 10 states participated in the election. The New York legislature chose no electors, and North Carolina and Rhode Island had not yet ratified the Constitution. ⁸As Jefferson and Burr were tied, the House of Representatives chose the President. In a vote by states, 10 votes were cast for Jefferson and 4 for Burr. Two votes were not cast.

Year	Presidential candidates	Party	Electoral vote	Vice-presidential candidates	Party	Electoral vote
1804 ¹	Thomas Jefferson	Dem.-Rep.	162	George Clinton	Dem.-Rep.	162
	Charles C. Pinckney	Federalist	14	Rufus King	Federalist	14
1808	James Madison	Dem.-Rep.	122	George Clinton	Dem.-Rep.	113
	Charles C. Pinckney	Federalist	47	Rufus King	Federalist	47
	George Clinton	Dem.-Rep.	6	John Langdon	Ind. (no party)	9
	Votes not cast		1	James Madison	Dem.-Rep.	3
				James Monroe	Dem.-Rep.	3
1812	James Madison	Dem.-Rep.	128	Votes not cast		1
	De Witt Clinton	Federalist	89	Elbridge Gerry	Dem.-Rep.	131
	Votes not cast		1	Jared Ingersoll	Federalist	86
				Votes not cast		1
1816	James Monroe	Dem.-Rep.	183	Daniel D. Tompkins	Dem.-Rep.	183
	Rufus King	Federalist	34	John E. Howard	Federalist	22
	Votes not cast		4	James Ross	Ind. (no party)	5
				John Marshall	Federalist	4
				Robert G. Harper	Ind. (no party)	3
				Votes not cast		4
1820	James Monroe	Dem.-Rep.	231	Daniel D. Tompkins	Dem.-Rep.	218
	John Quincy Adams	Ind. (no party)	1	Richard Stockton	Ind. (no party)	8
	Votes not cast		3	Daniel Rodney	Ind. (no party)	4
				Richard Rush	Ind. (no party)	1
				Robert G. Harper	Ind. (no party)	1
				Votes not cast		3
1824 ²	John Quincy Adams	(no party)	84	John C. Calhoun	(no party)	182
	Andrew Jackson	(no party)	99	Nathan Sanford	(no party)	30
	William H. Crawford	(no party)	41	Nathaniel Macon	(no party)	24
	Henry Clay	(no party)	37	Andrew Jackson	(no party)	13
				Martin Van Buren	(no party)	9
1828				Henry Clay	(no party)	2
	Andrew Jackson	Democratic	178	Votes not cast		1
	John Quincy Adams	Natl. Rep.	83	John C. Calhoun	Democratic	171
				Richard Rush	Natl. Rep.	83
				William Smith	Democratic	7
1832	Andrew Jackson	Democratic	219	Martin Van Buren	Democratic	189
	Henry Clay	Natl. Rep.	49	John Sergeant	Natl. Rep.	49
	John Floyd	Ind. (no party)	11	Henry Lee	Ind. (no party)	11
	William Wirt ³	Antimasonic	7	Amos Ellmaker	Antimasonic	7
	Votes not cast		2	William Wilkins	Ind. (no party)	30
				Votes not cast		2
1836	Martin Van Buren	Democratic	170	Richard M. Johnson ⁴	Democratic	147
	William H. Harrison	Whig	73	Francis Granger	Whig	77
	Hugh L. White	Whig	26	John Tyler	Democratic	47
	Daniel Webster	Whig	14	William Smith	Ind. (no party)	23
	W. P. Mangum	Ind. (no party)	11			

Year	Presidential candidates	Party	Electoral vote	Vice-presidential candidates	Party	Electoral vote
1840	William H. Harrison ⁵	Whig	234	John Tyler	Whig	234
	Martin Van Buren	Democratic	60	Richard M. Johnson	Democratic	48
				L. W. Tazewell	Ind. (no party)	11
				James K. Polk	Democratic	1
1844	James K. Polk	Democratic	170	George M. Dallas	Democratic	170
	Henry Clay	Whig	105	Theo. Frelinghuysen	Whig	105
1848	Zachary Taylor ⁶	Whig	163	Millard Fillmore	Whig	163
	Lewis Cass	Democratic	127	William O. Butler	Democratic	127
1852	Franklin Pierce	Democratic	254	William R. King	Democratic	254
	Winfield Scott	Whig	42	William A. Graham	Whig	42
1856	James Buchanan	Democratic	174	John C. Breckinridge	Democratic	174
	John C. Frémont	Republican	114	William L. Dayton	Republican	114
	Millard Fillmore	American ⁷	8	A. J. Donelson	American ⁷	8
1860	Abraham Lincoln	Republican	180	Hannibal Hamlin	Republican	180
	John C. Breckinridge	Democratic	72	Joseph Lane	Democratic	72
	John Bell	Const. Union	39	Edward Everett	Const. Union	39
	Stephen A. Douglas	Democratic	12	H. V. Johnson	Democratic	12
1864	Abraham Lincoln ⁸	Republican	212	Andrew Johnson	Republican	212
	George B. McClellan	Democratic	21	G. H. Pendleton	Democratic	21
1868	Ulysses S. Grant	Republican	214	Schuyler Colfax	Republican	214
	Horatio Seymour	Democratic	80	Francis P. Blair, Jr.	Democratic	80
	Votes not counted ⁹		23	Votes not counted ⁹		23

¹The first election in which the electors voted for President and Vice President on separate ballots. (*See* Amendment XII to the Constitution.) ²As no candidate had an electoral-vote majority, the House of Representatives chose the President from the first three. In a vote by states, 13 votes were cast for Adams, 7 for Jackson, and 4 for Crawford. ³The Antimasonic party, on Sept. 26, 1831, was the first party to hold a nominating convention to choose candidates for President and Vice President. ⁴As Johnson did not have an electoral-vote majority, the Senate chose him 33-14 over Granger, the others being legally out of the race. ⁵Harrison died Apr. 4, 1841, and Tyler succeeded him Apr. 6. ⁶Taylor died July 9, 1850, and Fillmore succeeded him July 10. ⁷Also known as the Know-Nothing party. ⁸Lincoln died Apr. 15, 1865, and Johnson succeeded him the same day. ⁹23 Southern electoral votes were excluded.

Year	Presidential candidates	Party	Electoral vote	Popular vote ¹	Vice-presidential candidates and party
1872	Ulysses S. Grant	Republican	286	3,597,132	Henry Wilson—R
	Horace Greeley	Dem., Liberal Rep.	(²)	2,834,125	B. Gratz Brown—D, LR—(4)
	Thomas A. Hendricks	Democratic	42		Scattering—(19)
	B. Gratz Brown	Dem., Liberal Rep.	18		Votes not counted—(14)
	Charles J. Jenkins	Democratic	2		
	David Davis	Democratic	1		
	Votes not counted		17		
1876 ³	Rutherford B. Hayes	Republican	185	4,033,768	William A. Wheeler—R
	Samuel J. Tilden	Democratic	184	4,285,992	Thomas A. Hendricks—D
	Peter Cooper	Greenback	0	81,737	Samuel F. Cary—G
1880	James A. Garfield ⁴	Republican	214	4,449,053	Chester A. Arthur—R
	Winfield S. Hancock	Democratic	155	4,442,035	William H. English—D
	James B. Weaver	Greenback	0	308,578	B. J. Chambers—G
1884	Grover Cleveland	Democratic	219	4,911,017	Thomas A. Hendricks—D
	James G. Blaine	Republican	182	4,848,334	John A. Logan—R
	Benjamin F. Butler	Greenback	0	175,370	A. M. West—G
	John P. St. John	Prohibition	0	150,369	William Daniel—P
1888	Benjamin Harrison	Republican	233	5,440,216	Levi P. Morton—R
	Grover Cleveland	Democratic	168	5,538,233	A. G. Thurman—D
	Clinton B. Fisk	Prohibition	0	249,506	John A. Brooks—P
	Alson J. Streeter	Union Labor	0	146,935	Charles E. Cunningham—U
1892 ⁵	Grover Cleveland	Democratic	277	5,556,918	Adlai E. Stevenson—D
	Benjamin Harrison	Republican	145	5,176,108	Whitelaw Reid—R
	James B. Weaver	People's ⁵	22	1,041,028	James G. Field—Peo
	John Bidwell	Prohibition	0	264,133	James B. Cranfill—P
1896	William McKinley	Republican	271	7,035,638	Garret A. Hobart—R
	William J. Bryan	Dem., People's ⁵	176	6,467,946	Arthur Sewall—D—(149)
	John M. Palmer	Natl. Dem.	0	133,148	Thomas E. Watson—Peo—(27)
	Joshua Levering	Prohibition	0	132,007	Simon B. Buckner—ND
					Hale Johnson—P

Year	Presidential candidates	Party	Electoral vote	Popular vote ¹	Vice-presidential candidates and party
1900	William McKinley ⁴	Republican	292	7,219,530	Theodore Roosevelt—R
	William J. Bryan	Dem., People's ⁵	155	6,358,071	Adlai E. Stevenson—D, Peo
	John G. Woolley	Prohibition	0	208,914	Henry B. Metcalf—P
	Eugene V. Debs	Social Democratic	0	94,768	Job Harriman—SD
1904	Theodore Roosevelt	Republican	336	7,628,834	Charles W. Fairbanks—R
	Alton B. Parker	Democratic	140	5,084,491	Henry G. Davis—D
	Eugene V. Debs	Socialist	0	402,400	Benjamin Hanford—S
	Silas C. Swallow	Prohibition	0	258,536	George W. Carroll—P
	Thomas E. Watson	People's	0	117,183	Thomas H. Tibbles—Peo
1908	William H. Taft	Republican	321	7,679,006	James S. Sherman—R
	William J. Bryan	Democratic	162	6,409,106	John W. Kern—D
	Eugene V. Debs	Socialist	0	420,820	Benjamin Hanford—S
	Eugene W. Chafin	Prohibition	0	253,840	Aaron S. Watkins—P
	Thomas L. Hisgen	Independence	0	82,872	John T. Graves—I
1912	Woodrow Wilson	Democratic	435	6,286,214	Thomas R. Marshall—D
	Theodore Roosevelt	Progressive	88	4,126,020	Hiram Johnson—Prog
	William H. Taft	Republican	8	3,483,922	Nicholas M. Butler—R ⁷
	Eugene V. Debs	Socialist	0	897,011	Emil Seldel—S
	Eugene W. Chafin	Prohibition	0	206,275	Aaron S. Watkins—P
1916	Woodrow Wilson	Democratic	277	9,129,606	Thomas R. Marshall—D
	Charles E. Hughes	Republican	254	8,538,221	Charles W. Fairbanks—R
	A. L. Benson	Socialist	0	538,221	G. R. Kirkpatrick—S R
	J. Frank Hanly	Prohibition	0	220,506	Ira Landrith—P
1920	Warren G. Harding ⁶	Republican	404	16,152,200	Calvin Coolidge—R
	James M. Cox	Democratic	127	9,147,353	Franklin D. Roosevelt—D
	Eugene V. Debs	Socialist	0	917,799	Seymour Stedman—S
	P. P. Christensen	Farmer-Labor	0	265,411	Max S. Hayes—FL
	Aaron S. Watkins	Prohibition	0	189,408	D. Leigh Colvin—P
1924	Calvin Coolidge	Republican	382	15,725,016	Charles G. Dawes—R
	John W. Davis	Democratic	136	8,385,586	Charles W. Bryan—D
	Robert M. LaFollette	Progressive, Socialist	13	4,822,856	Burton K. Wheeler—Prog. S
1928	Herbert Hoover	Republican	444	21,392,190	Charles Curtis—R
	Alfred E. Smith	Democratic	87	15,016,443	Joseph T. Robinson—D
	Norman Thomas	Socialist	0	267,420	James H. Maurer—S
1932	Franklin D. Roosevelt	Democratic	472	22,821,857	John N. Garner—D
	Herbert Hoover	Republican	59	15,761,841	Charles Curtis—R
	Norman Thomas	Socialist	0	884,781	James H. Maurer—S
	William Z. Foster	Communist	0	102,991	James W. Ford—C
	William D. Upshaw	Prohibition	0	81,869	Frank S. Regan—P
1936	Franklin D. Roosevelt	Democratic	523	27,751,597	John N. Garner—D
	Alfred M. Landon	Republican	8	16,679,583	Frank Knox—R
	William Lemke	Union	0	882,479	Thomas C. O'Brien—U
	Norman Thomas	Socialist	0	187,720	George Nelson—S
	Earl Browder	Communist	0	80,159	James W. Ford—C
1940	Franklin D. Roosevelt	Democratic	449	27,243,466	Henry A. Wallace—D
	Wendell L. Willkie	Republican	82	22,304,755	Charles L. McNary—R
	Norman Thomas	Socialist	0	99,557	Maynard C. Krueger—S
1944	Franklin D. Roosevelt ⁹	Democratic	432	25,602,505	Harry S. Truman
	Thomas E. Dewey	Republican	99	22,006,278	John W. Bricker—R
	Norman Thomas	Socialist	0	80,518	Darlington Hoopes—S
1948 ¹⁰	Harry S. Truman	Democratic	304	23,671,479	Alben W. Barkley—D
	Thomas E. Dewey	Republican	189	21,544,105	Earl Warren—R
	Henry A. Wallace	Progressive	0	1,116,390	Glen Taylor—P
	J. Strom Thurmond	States' Rights Dem.	38	1,006,363	Fielding L. Wright—S-R

¹For those candidates receiving over 75,000 votes. ²Greeley died Nov. 29, 1872, before his 66 electors voted. In the electoral balloting for President, 63 of Greeley's votes were scattered among Hendricks, Brown, Jencks and Davis; the other 3, included in "Votes not counted," were cast for Greeley by electors from Georgia. This was the first election in which every state chose its electors by popular vote. ³After the voting of the electoral college, Tilden had 184 undisputed votes, and Hayes 163. However, 22 other votes were in doubt, because two sets of electoral ballots were received from South Carolina, Louisiana, Florida and Oregon. For each of the three Southern states, one set was completely Democratic, the other completely Republican. For Oregon, one set gave all 3 of the state's votes to Hayes, the other gave one of the votes to Tilden. To settle the dispute, Congress created an Electoral Commission on Jan. 29, 1877. This commission, consisting of 5 Supreme Court justices, 5 senators and 5 representatives (8 Republicans and 7 Democrats), gave the 22 votes in question to Hayes. ⁴Garfield died Sept. 19, 1881, and Arthur succeeded him Sept. 20. ⁵The members of the People's party were known as Populists. ⁶McKinley died Sept. 14, 1901, and Roosevelt succeeded him the same day. ⁷James S. Sherman, Republican candidate for Vice President, died Oct. 30, 1912, and the Republican electoral votes were cast for Butler. ⁸Harding died Aug. 2, 1923, and Coolidge succeeded him Aug. 3. ⁹Roosevelt died Apr. 12, 1945, and Truman succeeded him the same day. ¹⁰Latest unofficial returns from the Associated Press as the Almanac went to press.

Vote for President, by States, Election of 1928

Source: Secretaries of State of the several states from records filed with the House of Representatives.

Candidates for President and Vice President:

Republican, Herbert Hoover, California; Charles Curtis, Kansas.

Democratic, Alfred E. Smith, New York; Joseph T. Robinson, Arkansas.

Socialist, Norman Thomas, New York; James H. Maurer, Pennsylvania.

Socialist Labor, Verne L. Reynolds, New York; Jeremiah D. Crowley, New York.

Prohibition, William F. Varney, New York; James A. Edgerton, Virginia.

Workers, William Z. Foster, Illinois; Benjamin Gitlow, New York.

State	Total	Rep.	Dem.	Plur.	Electoral R D	Soc. Soc. Lab.*	Prohib.	Other
Alabama.....	248,982	120,725	127,797	7,072 D	12	460		
Arizona.....	91,254	52,533	38,537	13,996 R	3			
Arkansas.....	197,693	77,751	119,196	41,445 D	9	429		
California.....	1,796,656	1,162,323	614,365	547,958 R	13	19,595		
Colorado.....	392,242	253,872	133,131	120,741 R	6	3,472		
Connecticut.....	553,031	296,614	252,040	44,574 R	7	3,019	622	
Delaware.....	105,891	68,860	36,643	32,217 R	3	329		
Florida.....	253,674	144,168	101,764	42,404 R	6	4,036		
Georgia.....	229,159	63,498	129,602	66,104 D	14	124		
Idaho.....	154,230	99,848	53,074	46,774 R	4	1,308		
Illinois.....	3,107,489	1,769,141	1,313,817	455,324 R	29	19,138	1,812	
Indiana.....	1,421,314	848,290	562,691	285,599 R	15	3,871	645	5,496
Iowa.....	1,009,362	623,818	378,936	244,882 R	13	2,960	230	
Kansas.....	713,200	513,672	193,003	320,669 R	10	6,205		
Kentucky.....	940,604	558,064	381,070	176,994 R	13	837	340	
Louisiana.....	215,833	51,160	164,655	113,495 D	10			
Maine.....	262,171	179,923	81,179	98,744 R	6	1,068		
Maryland.....	528,348	301,479	223,626	77,853 R	8	1,701	906	
Massachusetts.....	1,577,827	775,566	792,758	17,192 D	18	6,262	773	
Michigan.....	1,372,032	965,396	396,762	568,634 R	15	3,516	799	2,728
Minnesota.....	970,976	560,977	396,451	164,526 R	12	6,774	1,921	
Mississippi.....	151,692	27,153	124,539	97,386 D	10			
Missouri.....	1,500,721	834,080	662,562	171,518 R	18	3,739	340	
Montana.....	194,108	113,300	78,578	34,722 R	4	1,667		
Nebraska.....	547,138	345,745	197,959	147,786 R	8	3,434		
Nevada.....	32,417	18,327	14,090	4,237 R	3			
New Hampshire.....	196,747	115,404	80,715	34,689 R	4	455		
New Jersey.....	1,549,381	926,050	616,517	309,533 R	14	4,897	500	160
New Mexico.....	118,014	69,645	48,211	21,434 R	3			
New York.....	4,466,072	2,193,344	2,089,863	103,481 R	45	107,332	4,211	
North Carolina.....	636,070	348,992	287,078	61,914 R	12			
North Dakota.....	239,867	131,441	106,648	24,793 R	5	842		
Ohio.....	2,508,346	1,627,546	864,210	763,336 R	24	8,683	1,515	3,556
Oklahoma.....	618,427	394,046	219,174	174,872 R	10	3,924		
Oregon.....	319,942	205,341	109,223	96,118 R	5	2,720	1,564	
Pennsylvania.....	3,150,615	2,055,382	1,067,586	987,796 R	38	18,647	380	3,880
Rhode Island.....	242,784	117,522	118,973	1,451 D	5		416	
South Carolina.....	68,605	3,188	62,700	59,512 D	9	47		
South Dakota.....	261,865	157,603	102,660	54,943 R	5	443		
Tennessee.....	363,473	195,388	167,343	28,045 R	12	631		
Texas.....	708,999	367,036	341,032	26,004 R	20	722		
Utah.....	176,604	94,618	80,985	13,633 R	4	954		
Vermont.....	135,191	90,404	44,440	45,964 R	4			338
Virginia.....	305,358	164,609	140,146	24,463 R	12	250	180	
Washington.....	500,840	335,844	156,772	179,072 R	7	2,615	4,068	
West Virginia.....	642,752	375,551	263,784	111,767 R	8	1,313		1,703
Wisconsin.....	1,016,872	544,205	450,259	93,946 R	13	18,213	381	2,245
Wyoming.....	84,496	52,748	29,299	23,449 R	3	788		
Total.....	36,879,414	21,392,190	15,016,443	6,375,747 R	444	87	267,420	21,603

*Labor party in Maryland; Industrial party in Minnesota; Industrialist party in Pennsylvania.

†Breakdown of other votes: Workers 48,770; Anti-Smith 38,541; Farmer-Labor 6,390; void or scattering 60,700; blank or defective ballots 7,251.

Election of 1932

Candidates for President and Vice President:

Democratic, Franklin D. Roosevelt, New York; John N. Garner, Texas.

Republican, Herbert Hoover, California; Charles Curtis, Kansas.

Socialist, Norman Thomas, New York; James H. Maurer, Pennsylvania.

Socialist Labor, Verne L. Reynolds, New York; John W. Aiken, Massachusetts.

Prohibition, William D. Upshaw, Georgia; Frank S. Regan, Illinois.

Communist, William Z. Foster, Illinois; James W. Ford, New York.

Liberty, W. H. Harvey, Arkansas; F. B. Hemenway, Washington.

State	Total	Dem.	Rep.	Plur.	Electoral D R	Soc.	Soc. Lab.*	Prohib.	Others†
Alabama.....	245,034	207,910	34,675	173,235 D	11 ..	2,030	.....	13	406
Arizona.....	118,251	79,264	36,104	43,160 D	3 ..	2,618	.....	.....	265
Arkansas.....	220,562	189,602	28,467	161,135 D	9 ..	1,269	.....	.....	1,224
California.....	2,266,972	1,324,157	847,902	476,252 D	22 ..	63,299	.....	20,637	10,977
Colorado.....	457,696	250,877	189,617	61,260 D	6 ..	13,591	427	1,928	1,256
Connecticut.....	594,207	281,632	288,420	6,788 R	.. 8	20,480	2,287	.....	1,388
Delaware.....	112,901	54,319	57,073	2,754 R	.. 3	1,376	.....	.....	133
Florida.....	276,252	206,307	69,170	137,137 D	7 ..	775	.....	.....	.....
Georgia.....	255,590	234,118	19,863	214,255 D	12 ..	461	.....	1,125	23
Iaho.....	186,520	109,479	71,312	38,167 D	4 ..	526	.....	.....	5,203
Illinois.....	3,407,926	1,882,304	1,432,756	449,548 D	29 ..	67,258	3,638	6,388	15,582
Indiana.....	1,576,927	862,054	677,184	184,870 D	14 ..	21,388	2,070	10,399	3,832
Iowa.....	1,036,687	598,019	414,433	183,586 D	11 ..	20,467	.....	2,111	1,657
Kansas.....	791,978	424,204	349,498	74,706 D	9 ..	18,276	.....	.....	.....
Kentucky.....	983,063	580,574	394,716	185,858 D	11 ..	3,853	1,396	2,252	272
Louisiana.....	268,804	249,418	18,853	230,565 D	10 ..	.....	.....	.....	533
Maine.....	298,444	128,907	166,631	37,724 R	.. 5	2,489	255	.....	162
Maryland.....	511,054	314,314	184,184	130,130 D	8 ..	10,489	1,036	.....	1,031
Massachusetts.....	1,580,114	800,148	736,959	63,189 D	17 ..	34,305	2,668	1,142	4,892
Michigan.....	1,664,628	871,700	739,894	131,806 D	19 ..	39,205	1,401	2,893	9,535
Minnesota.....	1,002,843	600,806	363,959	236,847 D	11 ..	25,476	.....	.....	12,602
Mississippi.....	146,034	140,168	5,180	134,988 D	9 ..	686	.....	.....	.....
Missouri.....	1,609,894	1,025,406	564,713	460,693 D	15 ..	16,374	404	2,429	568
Montana.....	216,479	127,286	78,078	49,208 D	4 ..	7,891	.....	.....	3,224
Nebraska.....	570,135	359,082	201,177	157,905 D	7 ..	9,876	.....	.....	.....
Nevada.....	41,430	28,756	12,674	16,082 D	3 ..	.....	.....	.....	.....
New Hampshire.....	205,520	100,680	103,629	2,949 R	.. 4	947	.....	.....	264
New Jersey.....	1,630,063	806,630	775,684	30,946 D	16 ..	42,998	1,062	774	2,915
New Mexico.....	151,606	95,089	54,217	40,872 D	3 ..	1,776	.....	.....	524
New York.....	4,753,698	2,534,959	1,937,963	596,996 D	47 ..	177,397	10,339	.....	93,040
North Carolina.....	711,501	497,566	208,344	289,222 D	13 ..	5,591	.....	.....	.....
North Dakota.....	256,290	178,350	71,772	106,578 D	4 ..	3,521	.....	.....	2,647
Ohio.....	2,610,088	1,301,695	1,227,679	74,016 D	26 ..	64,094	1,968	7,421	7,231
Oklahoma.....	704,633	516,468	188,165	328,303 D	11 ..	.....	.....	.....	.....
Oregon.....	368,751	213,871	136,019	77,852 D	5 ..	15,450	1,730	.....	1,681
Pennsylvania.....	2,859,002	1,295,948	1,453,540	157,592 R	.. 36	91,119	659	11,319	6,417
Rhode Island.....	266,170	146,604	115,266	31,338 D	4 ..	3,138	433	183	546
South Carolina.....	104,407	102,347	1,978	100,469 D	8 ..	82	.....	.....	.....
South Dakota.....	288,438	183,515	99,212	84,303 D	4 ..	1,551	.....	463	3,697
Tennessee.....	390,638	259,817	126,806	133,011 D	11 ..	1,786	.....	1,995	234
Texas.....	863,426	760,348	97,959	662,389 D	23 ..	4,450	.....	.....	669
Vermont.....	206,579	116,750	84,795	31,955 D	4 ..	4,087	.....	.....	947
Washington.....	136,980	56,266	78,984	22,718 R	.. 3	1,533	.....	.....	197
West Virginia.....	297,942	203,979	89,637	114,342 D	11 ..	2,382	.....	1,843	101
Wisconsin.....	614,814	353,260	208,645	144,615 D	8 ..	17,080	1,009	1,540	33,280
Wyoming.....	743,774	405,124	330,731	74,393 D	8 ..	5,133	.....	2,342	444
.....	1,114,815	707,410	347,741	359,669 D	12 ..	53,379	494	2,672	3,119
.....	96,962	54,370	39,583	14,787 D	3 ..	2,829	.....	.....	180
.....	39,816,522	22,821,857	15,761,841	7,060,016 D	472 59	884,781	33,276	81,869	232,898

Industrialist party in Pennsylvania.

Breakdown of other votes: Communist 102,991; Liberty 53,425; Farmer-Labor 7,309; National 1,645; Industrialist (Minn.) 770; Jobless 725; Independent 533; Jacksonian 104; void or scattering 65,396.

Election of 1936

Candidates for President and Vice President:

Democratic, Franklin D. Roosevelt, New York; John N. Garner, Texas.

Republican, Alfred M. Landon, Kansas; Frank Knox, Illinois.

Socialist, Norman Thomas, New York; George Nelson, Wisconsin.

Prohibition, D. Leigh Colvin, New York; Claude A. Watson, California.

Communist, Earl Browder, Kansas; James W. Ford, New York.

Union, William Lemke, North Dakota; Thomas C. O'Brien, Massachusetts.

Socialist Labor, John W. Aiken, Massachusetts; Emil F. Teichert, New York.

State	Total	Dem.	Rep.	Plur.	Electoral		Soc.	Prohib.	Comm.	Others	
					D	R					
Alabama	275,744	238,196	35,358	202,838	D	11	242	719	678	55	
Arizona	124,163	86,722	33,433	53,289	D	3	317	384	...	3,30	
Arkansas	179,423	146,765	32,039	114,726	D	9	446	...	169	...	
California	2,638,882	1,766,836	836,431	930,405	D	22	11,331	12,917	10,877	45	
Colorado	488,676	295,021	181,267	113,754	D	6	1,593	...	497	10,25	
Connecticut	690,783	382,189	278,685	103,504	D	8	5,683	...	1,193	23,0	
Delaware	127,603	69,702	54,014	15,688	D	3	172	...	51	3,6	
Florida	327,365	249,117	78,248	170,869	D	7	...	...	...	...
Georgia	293,178	255,364	36,942	218,422	D	12	68	663	...	14	
Idaho	199,623	125,683	66,256	59,427	D	4	...	...	...	7,6
Illinois	3,956,522	2,282,999	1,570,393	712,606	D	29	7,530	3,439	801	91,3	
Indiana	1,650,897	934,974	691,570	243,404	D	14	3,856	...	1,090	19,4	
Iowa	1,142,733	621,756	487,977	133,779	D	11	1,373	1,182	506	29,9	
Kansas	865,013	464,520	397,727	66,793	D	9	2,766	...	...	...
Kentucky	926,206	541,944	369,702	172,242	D	11	632	929	204	12,7	
Louisiana	329,778	292,894	36,791	256,103	D	10	...	...	...	...
Maine	304,240	126,333	168,823	42,490	R	5	783	334	257	7,7	
Maryland	624,896	389,612	231,435	158,177	D	8	1,629	...	915	1,3	
Massachusetts	1,840,357	942,716	768,613	174,103	D	17	5,111	1,032	2,930	119,9	
Michigan	1,805,093	1,016,794	699,733	317,061	D	19	8,208	579†	3,384	76,3	
Minnesota	1,129,975	698,811	350,461	348,350	D	11	2,872	...	2,574	75,2	
Mississippi	162,090	157,318	4,443	152,875	D	9	329	...	...	...
Missouri	1,828,635	1,111,043	697,891	413,152	D	15	3,454	908	417	14,9	
Montana	230,512	159,690	63,598	96,092	D	4	1,066	224	385	5,5	
Nebraska	608,032	347,454	247,731	100,323	D	7	...	...	...	12,8
Nevada	43,848	31,925	11,923	20,002	D	3	...	...	...	...
New Hampshire	218,114	108,460	104,642	3,798	D	4	...	...	193	4,8
New Jersey	1,820,437	1,083,850	720,322	363,528	D	16	3,931	926	1,639	9,7	
New Mexico	168,920	105,838	61,710	44,128	D	3	343	62	43	9	
New York	5,596,398	3,293,222‡	2,180,670	837,628	D	47	86,897	...	35,609	...	
North Carolina	839,462	616,141	223,283	392,858	D	13	21	...	11	...	
North Dakota	273,716	163,148	72,751	90,397	D	4	552	197	360	36,7	
Ohio	3,012,425	1,747,122	1,127,709	619,413	D	26	117	...	5,251	132,2	
Oklahoma	749,740	501,069	245,122	255,947	D	11	2,221	1,328	...	...
Oregon	414,021	266,733	122,706	144,027	D	5	2,143	4	104	22,3	
Pennsylvania	4,138,105	2,353,788	1,690,300	663,488	D	36	14,375	6,691	4,060	68,8	
Rhode Island	311,149	165,233	125,012	40,221	D	4	...	...	411	20,4
South Carolina	115,437	113,791	1,646	112,145	D	8	...	...	...	10,3
South Dakota	296,452	160,137	125,977	34,160	D	4	...	...	...	...
Tennessee	475,531	327,083	146,516	180,567	D	11	685	632	319	2	
Texas	843,482	734,485	103,874	630,611	D	23	1,075	514	253	3,2	
Utah	216,677	150,246	64,555	85,691	D	4	432	43	280	1,1	
Vermont	143,689	62,124	81,023	18,899	R	3	...	...	405	1
Virginia	334,590	234,980	98,336	136,644	D	11	313	594	98	2	
Washington	692,338	459,579	206,892	252,687	D	8	3,496	1,041	1,907	19,4	
West Virginia	830,073	502,582	325,486	177,096	D	8	832	1,173	...	...
Wisconsin	1,258,712	802,984	380,828	422,156	D	12	10,626	1,071	2,197	61,0	
Wyoming	103,382	62,624	38,739	23,885	D	3	200	75	91	1,6	
Total	45,647,117	27,751,597	16,679,583	10,797,090	D	523	8	187,720	37,661	80,159	910,3

*Breakdown of other votes: Union (including Royal Oak, Independent, and Third) 882,479; Socialist Labor (including Labor, Industrial, and Independent Labor) 12,802; National Union for Social Justice 9,407; Independent Republican 3,222; Christian 1598; scattering 889.

†Commonwealth votes.

‡Includes 274,924 American Labor votes.

Election of 1940

Candidates for President and Vice President:

Democratic—Franklin D. Roosevelt, New York; Henry A. Wallace, Iowa.

Republican—Wendell L. Willkie, New York; Charles L. McNary, Oregon.

Socialist—Norman Thomas, New York; Maynard C. Krueger, Illinois.

Prohibition—Roger W. Babson, Massachusetts; Edgar V. Moorman, Illinois.

Communist—Earl Browder, Kansas; James W. Ford, New York.

Socialist Labor—John W. Aiken, Massachusetts; Aaron M. Orange, New York.

State	Total	Dem.	Rep.	Plur.	Electoral D R	Soc.	Prohib.	Comm.	Others*
Alabama.....	294,219	250,726	42,184	208,542 D	11 ..	100	700	509	.....
Arizona.....	150,039	95,267	54,030	41,237 D	3 ..	.....	742	.....	.....
Arkansas.....	201,838	158,622	42,122	116,500 D	9 ..	301	793	.....	.....
California.....	3,268,791	1,877,618	1,351,419	526,199 D	22 ..	.....	9,400	13,586	16,768
Colorado.....	549,004	265,554	279,576	14,022 R	6 ..	1,899	1,597	378	.....
Connecticut.....	781,502	417,621	361,819†	55,802 D	8 ..	.....	.....	1,091	971
Delaware.....	136,374	74,599	61,440	13,159 D	3 ..	115	220	.....	.....
Florida.....	485,492	359,334	126,158	233,176 D	7 ..	.....	.....	.....	.....
Georgia.....	312,553	265,194	23,934	241,260 D	12 ..	.....	983	.....	22,442
Iaho.....	235,168	127,842	106,553	21,289 D	4 ..	497	.....	276	.....
Illinois.....	4,217,935	2,149,934	2,047,240	102,694 D	29 ..	10,914	9,190	.....	657
Indiana.....	1,782,747	874,063	899,466	25,403 R	14 ..	2,075	6,437	.....	706
Iowa.....	1,215,430	578,800	632,370	53,570 R	11 ..	.....	2,284	1,524	452
Kansas.....	860,297	364,725	489,169	124,444 R	9 ..	2,347	4,056	.....	.....
Kentucky.....	970,063	557,222	410,384	146,838 D	11 ..	1,014	1,443	.....	.....
Louisiana.....	372,305	319,751	52,446	267,305 D	10 ..	.....	.....	.....	108
Maine.....	320,840	156,478	163,951	7,473 R	5 ..	.....	.....	411	.....
Maryland.....	660,104	384,546	269,534	115,012 D	8 ..	4,093	.....	1,274	657
Massachusetts.....	2,026,993	1,076,522	939,700	136,822 D	17 ..	4,091	1,370	3,806	1,504
Michigan.....	2,085,929	1,032,991	1,039,917	6,926 R	19 ..	7,593	1,795	2,834	799
Minnesota.....	1,251,188	644,196	596,274	47,922 D	11 ..	5,454	.....	2,711	2,553
Mississippi.....	175,824	168,267	2,814	165,453 D	9 ..	193	.....	.....	4,550
Missouri.....	1,833,729	958,476	871,009	87,467 D	15 ..	2,226	1,809	.....	209
Montana.....	247,873	145,698	99,579	46,119 D	4 ..	1,443	664	489	.....
Nebraska.....	615,878	263,677	352,201	88,524 R	7 ..	.....	.....	.....	.....
Nevada.....	53,174	31,945	21,229	10,716 D	3 ..	.....	.....	.....	.....
New Hampshire.....	235,419	125,292	110,127	15,165 D	4 ..	.....	.....	.....	.....
New Jersey.....	1,974,920	1,016,442	945,478	70,964 D	16 ..	2,837	872	8,836	455
New Mexico.....	183,014	103,699	79,315	24,384 D	3 ..	.....	.....	.....	.....
New York.....	6,301,596	3,251,918†	3,027,478	224,440 D	47 ..	18,950	3,250	.....	.....
North Carolina.....	822,648	609,015	213,633	395,382 D	13 ..	.....	.....	.....	.....
North Dakota.....	280,775	124,036	154,590	30,554 R	4 ..	1,279	325	.....	545
Ohio.....	3,319,912	1,733,139	1,586,773	146,366 D	26 ..	.....	.....	.....	.....
Oklahoma.....	826,212	474,313	348,872	125,441 D	11 ..	.....	3,027	.....	.....
Oregon.....	481,240	258,415	219,555	38,860 D	5 ..	398	154	191	2,527
Pennsylvania.....	4,078,714	2,171,035	1,889,848	281,187 D	36 ..	10,967	.....	4,519	2,345
Rhode Island.....	321,148	182,182	138,653	43,529 D	4 ..	.....	74	239	.....
South Carolina.....	99,830	95,470	1,727	93,743 D	8 ..	.....	.....	.....	2,633
South Dakota.....	308,427	131,362	177,065	45,703 R	4 ..	.....	.....	.....	.....
Tennessee.....	522,823	351,601	169,153	182,448 D	11 ..	463	1,606	.....	.....
Texas.....	1,041,168	840,151	199,152	640,999 D	23 ..	728	925	212	.....
Utah.....	247,819	154,277	93,151	61,126 D	4 ..	200	.....	191	.....
Vermont.....	143,062	64,269	78,371	14,102 R	3 ..	.....	.....	411	11
Virginia.....	346,607	235,961	109,363	126,598 D	11 ..	282	882	71	48
Washington.....	793,833	462,145	322,123	140,022 D	8 ..	4,586	1,686	2,626	667
West Virginia.....	868,076	495,662	372,414	123,248 D	8 ..	.....	.....	.....	.....
Wisconsin.....	1,405,540	704,821	679,206	25,615 D	12 ..	15,071	2,148	2,394	1,900
Wyoming.....	112,240	59,287	52,633	6,654 D	3 ..	148	172	.....	.....
Al.....	49,820,312	27,244,160	22,305,198	4,938,962 D	449 82	100,264	58,604	48,579	63,507

Breakdown of other votes: Independent Democrat 22,428; Progressive 16,506; Socialist Labor 10,164; Independent Republican 4,550; Industrial 2,553; Jeffersonian Democrat 2,496; Industrial Government 1,518; Labor Party of Maryland 657; Alfred Knutson 545; Republican (Tolbert Faction) 137; scattering 1,953.

Includes 798 Union votes.

Includes 417,418 American Labor votes.

Election of 1944

Candidates for President and Vice President:

Democratic—Franklin D. Roosevelt, New York; Harry S. Truman, Missouri.

Republican—Thomas E. Dewey, New York; John W. Bricker, Ohio.

Socialist—Norman Thomas, New York; Darlington Hoopes, Pennsylvania.

Prohibition—Claude A. Watson, California; Andrew Johnson, Kentucky.

Socialist Labor*—Edward A. Teichert, Pennsylvania; Arla A. Albaugh, Ohio.

State	Total	Dem.*	Rep.	Plur.	Electoral D R	Soc.	Prohib.	Soc. Lab.	Other
Alabama.....	244,743	198,918	44,540	154,378 D	11 —	190	1,095	—	—
Arizona.....	137,634	80,926	56,287	24,639 D	4 —	—	421	—	—
Arkansas.....	212,956	148,965	63,551	85,414 D	9 —	440	—	—	—
California.....	3,520,875	1,988,564	1,512,965	475,599 D	25 —	3,923	14,770	327	—
Colorado.....	505,039	234,331	268,731	34,400 R	— 6	1,977	—	—	—
Connecticut.....	831,990	435,146	390,527	44,619 D	8 —	5,097	—	1,220	—
Delaware.....	125,361	68,166	56,747	11,419 D	3 —	154	294	—	—
Florida.....	482,592	339,377	143,215	196,162 D	8 —	—	—	—	—
Georgia.....	328,109	268,187	56,507	211,680 D	12 —	6	36	—	—
Idaho.....	208,321	107,399	100,137	7,262 D	4 —	282	503	—	—
Illinois.....	4,036,061	2,079,479	1,939,314	140,165 D	28 —	180	7,411	9,677	—
Indiana.....	1,672,091	781,403	875,891	94,488 R	— 13	2,223	12,574	—	—
Iowa.....	1,052,599	499,876	547,267	47,391 R	— 10	1,511	3,752	193	—
Kansas.....	733,776	287,458	442,096	154,638 R	— 8	1,613	2,609	—	—
Kentucky.....	867,921	472,589	392,448	80,141 D	11 —	535	2,023	326	—
Louisiana.....	349,383	281,564	67,750	213,814 D	10 —	—	—	—	—
Maine.....	296,400	140,631	155,434	14,803 R	— 5	—	—	335	—
Maryland.....	608,439	315,490	292,949	22,541 D	8 —	—	—	—	—
Massachusetts.....	1,960,665	1,035,296	921,350	113,946 D	16 —	—	973	2,780	—
Michigan.....	2,205,223	1,106,899	1,084,423	22,476 D	19 —	4,598	6,503	1,264	—
Minnesota.....	1,125,529	589,864	527,416	62,448 D	11 —	5,073	—	3,176	—
Mississippi.....	180,080	158,515	3,742	154,773 D	9 —	—	—	—	—
Missouri.....	1,571,677	807,356	761,175	46,181 D	15 —	1,751	1,175	220	—
Montana.....	207,355	112,556	93,163	19,393 D	4 —	1,296	340	—	—
Nebraska.....	563,126	233,246	329,880	96,634 R	— 6	—	—	—	—
Nevada.....	54,234	29,623	24,611	5,012 D	3 —	—	—	—	—
New Hampshire.....	229,625	119,663	109,916	9,747 D	4 —	46	—	—	—
New Jersey.....	1,963,761	987,874	961,335	26,539 D	16 —	3,358	4,255	6,939	—
New Mexico.....	152,225	81,389	70,688	10,701 D	4 —	—	148	—	—
New York.....	6,316,790	3,304,238†	2,987,647	316,591 D	47 —	10,553	—	14,352	—
North Carolina.....	790,554	527,399	263,155	264,244 D	14 —	—	—	—	—
North Dakota.....	220,171	100,144	118,535	18,391 R	— 4	943	549	—	—
Ohio.....	3,153,056	1,570,763	1,582,293	11,530 R	— 25	—	—	—	—
Oklahoma.....	722,636	401,549	319,424	82,125 D	10 —	—	1,663	—	—
Oregon.....	480,147	248,635	225,365	23,270 D	6 —	3,785	2,362	—	—
Pennsylvania.....	3,794,793	1,940,479	1,835,054	105,425 D	35 —	11,721	5,750	1,789	—
Rhode Island.....	299,276	175,356	123,487	51,869 D	4 —	—	433	—	—
South Carolina.....	103,375	90,601	4,547	86,054 D	8 —	—	365	—	—
South Dakota.....	232,076	96,711	135,365	38,654 R	— 4	—	—	—	—
Tennessee.....	510,692	308,707	200,311	108,396 D	12 —	792	882	—	—
Texas.....	1,150,326	821,605	191,425	630,180 D	23 —	593	1,013	—	—
Utah.....	248,319	150,088	97,891	52,197 D	4 —	340	—	—	—
Vermont.....	125,361	53,820	71,527	17,707 R	— 3	—	—	—	—
Virginia.....	388,485	242,276	145,243	97,033 D	11 —	417	459	90	—
Washington.....	856,328	486,774	361,689	125,085 D	8 —	3,824	2,396	1,645	—
West Virginia.....	715,596	392,777	322,819	69,958 D	8 —	—	—	—	—
Wisconsin.....	1,339,152	650,413	674,532	24,119 R	— 12	13,205	—	1,002	—
Wyoming.....	101,340	49,419	51,921	2,502 R	— 3	—	—	—	—
Total.....	47,976,263	25,602,504	22,006,285	3,596,219 D	432 99	80,426	74,754	45,335	16

*Industrial Government candidates in Minnesota, New York and Pennsylvania.

†Breakdown of other votes: Texas Regulars 135,439; Regular Democrat 9,964; Independent Republican 7,799; Independent Democrat 3,373; America First 1,781; Republican (Tolbert Factor) 63; scattering 681.

‡Includes 496,405 American Labor and 329,235 Liberal votes.

Election of 1948

(Latest unofficial returns from the Associated Press as the Almanac went to press)

Candidates for President and Vice President

Democratic—Harry S. Truman, Missouri; Alben W. Barkley, Kentucky.

Republican—Thomas E. Dewey, New York; Earl Warren, California.

States'-Rights Democratic—J. Strom Thurmond, South Carolina; Fielding L. Wright, Mississippi.

Progressive—Henry A. Wallace, Iowa; Glen H. Taylor, Idaho.

Socialist—Norman Thomas, New York; Tucker P. Smith, Michigan.

Prohibition—Claude A. Watson, California; Dale Learn, Pennsylvania.

Socialist Labor—Edward A. Teichert, Pennsylvania; Stephen Emery, New York.

State	Total	Dem. ¹	Rep.	S-R Dem. ²	Plurality	Electoral ³			Prog. ⁴
						D	R	S	
Alabama	159,963	.....	26,713	132,073	105,360 S	..	..	11	1,177
Arizona	105,653	59,101	45,075	.....	14,026 D	4	..	..	1,477
Arkansas	197,219	121,351	40,236	34,987	81,115 D	9	..	..	645
California	3,906,070	1,876,934	1,844,422	.....	32,512 D	25	..	..	184,714
Colorado	477,182	245,788	226,456	.....	19,332 D	6	..	..	4,938
Connecticut	873,824	422,228	438,226	.....	15,998 R	..	8	..	13,370
Delaware	137,840	67,921	69,633	.....	1,712 R	..	3	..	286
Florida	538,944	262,419	180,837	84,208	81,582 D	8	..	..	11,480
Georgia	388,855	235,407	69,992	81,730	153,677 D	12	..	..	1,726
Idaho	209,020	105,395	99,502	.....	5,893 D	4	..	..	4,123
Illinois	3,937,588	1,987,754	1,949,834	.....	37,920 D	28	..	..	.....
Indiana	1,624,952	806,001	817,385	.....	11,384 R	..	13	..	1,566
Iowa	1,023,212	523,502	488,933	.....	34,569 D	10	..	..	10,777
Kansas	752,919	337,804	411,430	.....	73,626 R	..	8	..	3,685
Kentucky	817,472	464,868	341,540	9,700	123,328 D	11	..	..	1,364
Louisiana	356,624	113,736	63,647	176,827	63,091 S	..	..	10	2,414
Maine	262,617	111,153	149,577	.....	38,424 R	..	5	..	1,887
Maryland	591,638	285,834	293,929	2,483	8,095 R	..	8	..	9,392
Massachusetts	2,100,137	1,160,198	901,013	.....	259,185 D	16	..	..	38,926
Michigan	2,034,460	972,616	1,022,007	.....	49,391 R	..	19	..	39,837
Minnesota	1,133,831	640,887	457,021	.....	183,866 D	11	..	..	35,923
Mississippi	124,215	11,208	3,661	109,133	97,925 S	..	..	9	213
Missouri	1,537,327	895,402	638,556	.....	256,846 D	15	..	..	3,369
Montana	211,721	113,398	91,741	.....	21,657 D	4	..	..	6,582
Nebraska	478,439	219,776	258,663	.....	38,887 R	..	6	..	.....
Nevada	61,134	30,568	29,102	.....	1,466 D	3	..	..	1,464
New Hampshire	231,264	107,995	121,299	.....	13,304 R	..	4	..	1,970
New Jersey	1,907,497	894,791	973,629	.....	78,838 R	..	16	..	39,077
New Mexico	183,365	102,539	80,044	.....	22,495 D	4	..	..	782
New York	6,128,945	2,782,555	2,837,848	.....	55,293 R	..	47	..	508,542
North Carolina	715,110	427,584	220,693	63,224	206,891 D	14	..	..	3,609
North Dakota	166,925	72,819	89,121	111	16,302 R	..	4	..	4,874
Ohio	2,939,875	1,461,476	1,443,025	.....	18,451 D	25	..	..	35,374
Oklahoma	721,599	452,782	268,817	.....	183,965 D	10	..	..	.....
Oregon	512,827	240,083	257,932	.....	17,849 R	..	6	..	14,812
Pennsylvania	3,706,949	1,751,186	1,901,160	.....	149,974 R	..	35	..	54,603
Rhode Island	326,098	188,619	134,892	.....	53,727 D	4	..	..	2,587
South Carolina	129,905	31,245	5,337	93,143	61,898 S	..	..	8	180
South Dakota	222,509	105,226	114,972	.....	9,746 R	..	4	..	2,311
Tennessee	520,096	254,964	191,396	72,192	63,568 D	12	..	..	1,544
Texas	1,157,754	768,160	281,673	104,126	486,487 D	23	..	..	3,795
Utah	275,837	149,046	124,349	.....	24,697 D	4	..	..	2,442
Vermont	122,897	45,594	76,066	.....	30,472 R	..	3	..	1,237
Virginia	417,844	200,868	172,649	42,426	28,219 D	11	..	..	1,901
Washington	821,758	443,666	351,089	.....	92,577 D	8	..	..	27,003
West Virginia	735,769	424,633	308,473	.....	116,160 D	8	..	..	2,663
Wisconsin	1,254,505	644,452	584,854	.....	59,598 D	12	..	..	25,199
Wyoming	96,153	49,947	45,656	.....	4,291 D	3	..	..	550
Total	47,338,337	23,671,479	21,544,105	1,006,363	2,127,374 D	304	189	38	1,116,390

¹Truman was not on the ballot in Alabama. ²Thurmond was on the ballot only in Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Minnesota, Mississippi, North Carolina, North Dakota, South Carolina, Tennessee, Texas, and Virginia. ³This is the electoral vote indicated by the election of November 2. It is possible that some of Thurmond's vote will be given to Truman when the electoral college cast their votes. ⁴Wallace was not on the ballot in Illinois, Nebraska, and Oklahoma.

Electoral Vote for President, 1888-1924

States	1888	1892	1896	1900	1904	1908	1912	1916	1920	1924
	Harrison, Rep. Cleveland, Dem.	Cleveland, Dem. Harrison, Rep. Weaver, Pro.	McKinley, Rep. Bryan, Dem.	McKinley, Rep. Bryan, Dem.	Roosevelt, Rep. Parker, Dem.	Taft, Rep. Bryan, Dem.	Wilson, Dem. Taft, Rep. Roosevelt, Prog.	Wilson, Dem. Hughes, Rep.	Harding, Rep. Cox, Dem.	Coolidge, Rep. Davis, Dem. La Follette, Prog.
Alabama	10	11	11	11	11	11	12	12	12	12
Arizona							3	3	3	3
Arkansas	7	8	8	8	9	9	9	9	9	9
California	8	8	1	8	10	10	2	13	13	13
Colorado	3	4	4	4	5	5	6	6	6	6
Connecticut	6	6	6	6	7	7	7	7	7	7
Delaware	3	3	3	3	3	3	3	3	3	3
Florida	4	4	4	4	5	5	6	6	6	6
Georgia	12	13	13	13	13	13	14	14	14	14
Idaho		3	3	3	3	3	4	4	4	4
Illinois	22	24	24	24	27	27	29	29	29	29
Indiana	15	15	15	15	15	15	15	15	15	15
Iowa	13	13	13	13	13	13	13	13	13	13
Kansas	9	10	10	10	10	10	10	10	10	10
Kentucky	13	12	13	13	13	13	13	13	13	13
Louisiana	8	8	8	8	9	9	10	10	10	10
Maine	6	6	6	6	6	6	6	6	6	6
Maryland	8	8	8	8	7	6	8	8	8	8
Massachusetts	14	15	15	15	16	16	18	18	18	18
Michigan	13	9	14	14	14	14	15	15	15	15
Minnesota	7	9	9	9	11	11	12	12	12	12
Mississippi	9	9	9	9	10	10	10	10	10	10
Missouri	16	17	17	17	18	18	18	18	18	18
Montana		3	3	3	3	3	4	4	4	4
Nebraska	5	8	8	8	8	8	8	8	8	8
Nevada	3	3	3	3	3	3	3	3	3	3
New Hampshire	4	4	4	4	4	4	4	4	4	4
New Jersey	9	10	10	10	12	12	14	14	14	14
New Mexico							3	3	3	3
New York	36	36	36	36	39	39	45	45	45	45
North Carolina	11	11	11	11	12	12	12	12	12	12
North Dakota		1	3	3	4	4	5	5	5	5
Ohio	23	22	23	23	23	23	24	24	24	24
Oklahoma						7	10	10	10	10
Oregon	3	3	4	4	4	4	5	5	5	5
Pennsylvania	30	32	32	32	34	34	38	38	38	38
Rhode Island	4	4	4	4	4	4	5	5	5	5
South Carolina	9	9	9	9	9	9	9	9	9	9
South Dakota		4	4	4	4	4	5	5	5	5
Tennessee	12	12	12	12	12	12	12	12	12	12
Texas	13	15	15	15	18	18	20	20	20	20
Utah			3	3	3	3	4	4	4	4
Vermont	4	4	4	4	4	4	4	4	4	4
Virginia	12	12	12	12	12	12	12	12	12	12
Washington		4	4	4	5	5	7	7	7	7
West Virginia	6	6	6	6	7	7	8	1	8	8
Wisconsin	11	12	12	12	13	13	13	13	13	13
Wyoming		3	3	3	3	3	3	3	3	3
Total	233 168	277 145 22	271 176	292 155	336 140	321 162	435 8 88	277 254	404 127	382 136

NOTE: For electoral votes by state in elections later than 1924, see Pages 134-39.

CONGRESS

Representatives Under Each Apportionment

Source: The Congressional Directory.

Note.—The apportionment based on the Sixteenth Census (1940) distributes the 435 seats in the House among the States according to the method of equal proportions. By this method the percent difference between the average number of Representatives per million people in any 2 States is made as small as possible. Also, the percent difference between the average districts, i. e., the average number of persons per representative, in any 2 States is made as small as possible. By equalizing the representation of all pairs of States, the method gives as nearly equal representation as possible to all States in proportion to their population.

State	Constitutional apportionment	First Census, 1790	Second Census, 1800	Third Census, 1810	Fourth Census, 1820	Fifth Census, 1830	Sixth Census, 1840	Seventh Census, 1850	Eighth Census, 1860	Ninth Census, 1870	Tenth Census, 1880	Eleventh Cen- sus, 1890	Twelfth Census, 1900	Thirteenth Cen- sus, 1910*	Fifteenth Cen- sus, 1930	Sixteenth Cen- sus, 1940
Alabama.....				1	3	5	7	7	6	8	8	9	9	10	9	9
Arizona.....														1	1	2
Arkansas.....						1	1	2	3	4	5	6	7	7	7	7
California.....							2	2	3	4	6	7	8	11	20	23
Colorado.....									1	1	2	3	4	4	4	4
Connecticut.....	5	7	7	7	6	6	4	4	4	4	4	4	5	5	6	6
Delaware.....	1	1	1	2	1	1	1	1	1	1	2	2	3	4	5	6
Florida.....														1	1	1
Georgia.....	3	2	4	6	7	9	8	8	7	9	10	11	11	12	10	10
Idaho.....											1	1	1	2	2	2
Illinois.....				1	1	3	7	9	14	19	20	22	25	27	27	26
Indiana.....				1	3	7	10	11	11	13	13	13	13	13	12	11
Iowa.....								2	6	9	11	11	11	11	9	8
Kansas.....									1	3	7	8	8	8	7	6
Kentucky.....		2	6	10	12	13	10	10	9	10	11	11	11	11	9	9
Louisiana.....				1	3	3	4	4	5	6	6	6	7	8	8	8
Maine.....				7	7	8	7	6	5	5	4	4	4	4	3	3
Maryland.....	6	8	9	9	9	8	6	6	5	6	6	6	6	6	6	6
Massachusetts.....	8	14	17	13	13	12	10	11	10	11	12	13	14	16	15	14
Michigan.....						1	3	4	6	9	11	12	12	13	17	17
Minnesota.....								2	2	3	5	7	9	10	9	9
Mississippi.....				1	1	2	4	5	5	6	7	7	8	8	7	7
Missouri.....					1	2	5	7	9	13	14	15	16	16	13	13
Montana.....											1	1	1	2	2	2
Nebraska.....									1	1	3	6	6	6	5	4
Nevada.....									1	1	1	1	1	1	1	1
New Hampshire.....	3	4	5	6	6	5	4	3	3	3	2	2	2	2	2	2
New Jersey.....	4	5	6	6	6	6	5	5	5	7	7	8	10	12	14	14
New Mexico.....														1	1	2
New York.....	6	10	17	27	34	40	34	33	31	33	34	34	37	43	45	45
North Carolina.....	5	10	12	13	13	13	9	8	7	8	9	9	10	10	11	12
North Dakota.....											1	1	2	3	2	2
Ohio.....			1	6	14	19	21	21	19	20	21	21	21	22	24	23
Oklahoma.....													5	8	9	8
Oregon.....								1	1	1	1	2	2	3	3	4
Pennsylvania.....	8	13	18	23	26	28	24	25	24	27	28	30	32	36	34	33
Rhode Island.....	1	2	2	2	2	2	2	2	2	2	2	2	2	3	2	2
South Carolina.....	5	6	8	9	9	9	7	6	4	5	7	7	7	7	6	6
South Dakota.....											2	2	2	3	2	2
Tennessee.....		1	3	6	9	13	11	10	8	10	10	10	10	10	9	10
Texas.....							2	2	4	6	11	13	16	18	21	21
Utah.....												1	1	2	2	2
Vermont.....		2	4	6	5	5	4	3	3	3	2	2	2	2	1	1
Virginia.....	10	19	22	23	22	21	15	13	11	9	10	10	10	10	9	9
Washington.....											1	2	3	5	6	6
West Virginia.....										3	4	4	5	6	6	6
Wisconsin.....							2	3	6	8	9	10	11	11	10	10
Wyoming.....											1	1	1	1	1	1
Total.....	65	106	142	186	213	242	232	237	243	293	332	357	391	435	435	435

*No apportionment was made in 1920.

CONGRESS OF THE UNITED STATES

PARTY STRENGTH IN CONGRESS

The Senate (Necessary to majority—49)

	73rd 1933	74th 1935	75th 1937	76th 1939	77th 1941	78th 1943	79th 1945	80th 1947	81st 1949
Democratic	59	69	75	69	66	57	57	45	41
Republican	36	25	17	23	28	38	38	51	59
Farmer-Labor	1	1	2	2	0	0	0	0	0
Progressive	0	1	1	1	1	1	1	0	0
Independent	0	0	1	1	1	0	0	0	0

The House (Necessary to majority—218)

	73rd 1933	74th 1935	75th 1937	76th 1939	77th 1941	78th 1943	79th 1945	80th 1947	81st 1949
Democratic	313	322	333	262	268	222	243	188	204
Republican	117	103	89	170	162	209	190	246	215
Farmer-Labor	5	3	5	1	1	1	0	0	0
Progressive	0	7	8	2	3	2	1	0	0
Independent	0	0	0	0	1	0	0	0	0
American Labor	0	0	0	0	0	1	1	1	1

NOTE: The year shown with each Congress is the one in which the first session was held. The party broken down is according to the election held the preceding November.

THE EIGHTY-FIRST CONGRESS

THE SENATE

Democrats are in *italic* type; Republicans in roman. Expiration dates of terms are indicated in parentheses. An asterisk (*) indicates that the senator was returned to office in the election of Nov. 2, 1948.

ALABAMA

Lister Hill (1951)
**John J. Sparkman* (1955)

ARIZONA

Carl Hayden (1951)
Ernest W. McFarland
(1953)

ARKANSAS

J. William Fulbright
(1951)
**John L. McClellan* (1955)

CALIFORNIA

Sheridan Downey (1951)
William F. Knowland
(1953)

COLORADO

Eugene D. Millikin (1951)
**Edwin C. Johnson* (1955)

CONNECTICUT

Brien McMahon (1951)
Raymond E. Baldwin
(1953)

DELAWARE

John J. Williams (1953)
J. Allen Frear, Jr. (1955)

FLORIDA

Claude Pepper (1951)
Spessard L. Holland
(1953)

GEORGIA

Walter F. George (1951)
**Richard B. Russell* (1955)

IDAHO

Glen H. Taylor (1951)
Bert H. Miller (1955)

ILLINOIS

Scott W. Lucas (1951)
Paul H. Douglas (1955)

INDIANA

Homer E. Capehart (1951)
William E. Jenner (1953)

IOWA

Bourke B. Hickenlooper
(1951)
Guy M. Gillette (1955)

KANSAS

Clyde M. Reed (1951)
Andrew F. Schoeppel
(1955)

KENTUCKY

Alben W. Barkley (1951)
Virgil Chapman (1955)

LOUISIANA

Russell B. Long (1951)*
**Allen J. Ellender* (1955)

MAINE

Owen Brewster (1953)
Margaret Chase Smith
(1955)*

MARYLAND

Millard E. Tydings (1951)
Herbert R. O'Connor (1955)

MASSACHUSETTS

Henry Cabot Lodge, Jr.
(1953)
**Leverett Saltonstall*
(1955)

MICHIGAN

Arthur H. Vandenberg
(1953)
**Homer Ferguson* (1955)

MINNESOTA

Edward J. Thye (1953)
Hubert H. Humphrey
(1955)

MISSISSIPPI

John Cornelius Stennis
(1953)⁴
**James O. Eastland* (1955)

MISSOURI

Forrest C. Donnell (1951)
James P. Ken (1953)

MONTANA

Zales N. Ecton (1953)
**James E. Murray* (1955)

NEBRASKA

Hugh Butler (1953)
**Kenneth S. Wherry* (1955)

NEVADA

Patrick McCarran (1951)
George W. Malone (1953)

NEW HAMPSHIRE

Charles W. Tobey (1951)
**Styles Bridges* (1955)

NEW JERSEY

H. Alexander Smith (1953)
Robert C. Hendrickson
(1955)

NEW MEXICO

Dennis Chavez (1953)
Clinton P. Anderson (1955)

NEW YORK

Robert F. Wagner (1951)
Irving M. Ives (1953)

NORTH CAROLINA

Clyde R. Hoey (1951)
J. Melville Broughton
(1955)

NORTH DAKOTA

Milton R. Young (1951)
William Langer (1953)

OHIO

Robert A. Taft (1951)
John W. Bricker (1953)

OKLAHOMA

Elmer Thomas (1951)
Robert S. Kerr (1955)

OREGON

Wayne L. Morse (1951)
**Guy Cordon* (1955)

PENNSYLVANIA

Francis J. Myers (1951)
Edward Martin (1953)

RHODE ISLAND

J. Howard McGrath (1953)
**Theodore F. Green* (1955)

SOUTH CAROLINA

Oliver D. Johnston (1951)
**Burnet R. Maybank*
(1955)

SOUTH DAKOTA

Chan Gurney (1951)
Karl E. Mundt (1955)

TENNESSEE

Kenneth McKellar (1953)
Estes Kefauver (1955)

TEXAS

Tom Connally (1953)
Lyndon B. Johnson (1955)

UTAH

Elbert D. Thomas (1951)
Arthur V. Watkins (1953)

VERMONT

George D. Aiken (1951)
Ralph E. Flanders (1953)

VIRGINIA

Harry Flood Byrd (1953)
**A. Willis Robertson* (1955)

WASHINGTON

Warren G. Magnuson
(1951)
Harry P. Cain (1953)

WEST VIRGINIA

Harley M. Kilgore (1953)
Matthew M. Neely (1955)

WISCONSIN

Alexander Wiley (1951)
Joseph R. McCarthy (1953)

WYOMING

Joseph C. O'Mahoney
(1953)
Lester C. Hunt (1955)

¹A successor will be appointed when Barkley becomes Vice President on Jan. 20, 1949. ²Elected Nov. 2, 1948, to fill vacancy caused by death of John H. Overton. ³Elected in state election of Sept. 13, 1948. ⁴Elected Nov. 4, 1947, to fill vacancy caused by death of Theodore G. Bilbo.

THE HOUSE OF REPRESENTATIVES

Democrats are in *italic* type; Republicans in roman; American Labor in SMALL CAPS. The numerals indicate the Congressional Districts of the states, and the designation At-L means At-Large. An asterisk (*) indicates that the congressman was returned to office in the election of Nov. 2, 1948.

ALABAMA

1. **Frank W. Boykin*
2. **George M. Grant*
3. **George W. Andrews*
4. **Sam Hobbs*
5. **Albert Rains*
6. *Edward deGraffenreid*
7. *Carl Elliott*
8. **Robert E. Jones, Jr.*
9. **Laurie C. Battle*

ARIZONA¹

1. **John R. Murdock*
2. *Harold A. Patten*

ARKANSAS

1. **E. C. Gathings*
2. **Wilbur D. Mills*
3. **James W. Trimble*
4. *Boyd Tackett*
5. **Brooks Hays*
6. **W. F. Norrell*
7. **Oren Harris*

CALIFORNIA

1. *Hubert R. Scudder*
2. **Clair Engle*
3. **Leroy Johnson*

4. **Franck R. Havenner*
5. **Richard J. Welch*
6. **George P. Miller*
7. **John J. Allen, Jr.*
8. **Jack Z. Anderson*
9. *Cecil F. White*
10. *Thomas H. Werdel*
11. **Ernest K. Bramblett*
12. **Richard M. Nixon*
13. **Norris Poulson*
14. **Helen Gahagan Douglas*
15. **Gordon L. McDonough*
16. **Donald L. Jackson*

House of Representatives—(cont.)

California—(cont.)

17. *Cecil R. King
18. Clyde Doyle
19. *Chet Holifield
20. *Carl Hinshaw
21. *Harry R. Sheppard
22. *John Phillips
23. Clinton D. McKinnon

COLORADO

1. *John A. Carroll
2. *William S. Hill
3. John H. Marsalis
4. Wayne N. Aspinall

CONNECTICUT

1. Abraham A. Ribicoff
 2. Mrs. Chase G. Woodhouse
 3. John A. McGuire
 4. *John Davis Lodge
 5. *James T. Patterson
- At-L. *Antoni N. Sadlak

DELAWARE

- At-L. *J. Caleb Boggs

FLORIDA

1. *J. Hardin Peterson
2. Charles E. Bennett
3. *Robert L. F. Sikes
4. *George A. Smathers
5. A. S. (Syd) Herlong
6. *Dwight L. Rogers

GEORGIA

1. *Prince H. Preston, Jr.
2. *E. E. Cox
3. *Stephen Pace
4. *A. Sidney Camp
5. *James C. Davis
6. *Carl Vinson
7. *Henderson Lanham
8. *W. M. (Don) Wheeler
9. *John S. Wood
10. *Paul Brown

IDAHO

1. Compton I. White
2. *John Sanborn

ILLINOIS^a

1. *William L. Dawson
2. Barratt O'Hara
3. Neil J. Linehan
4. James V. Buckley
5. *Martin Gorski
6. *Thomas J. O'Brien
7. *Adolph J. Sabath
8. *Thomas S. Gordon

9. Sidney R. Yates
10. Richard W. Hoffman
11. Chester A. Chesney
12. Edgar A. Jonas
13. *Ralph E. Church
14. Chauncey W. Reed
15. *Noah M. Mason
16. *Leo E. Allen
17. *Leslie C. Arends
18. Harold H. Velde
19. *Robert B. Chipfield
20. *Sid Simpson
21. Peter F. Mack, Jr.
22. *Rolla C. McMillen
23. *Edward H. Jenison
24. *Charles W. Vursell
25. *Melvin Price
26. *C. W. (Runt) Bishop

INDIANA

1. *Ray J. Madden
2. *Charles A. Halleck
3. Thurman C. Crook
4. Edward H. Kruse, Jr.
5. John R. Walsh
6. Mrs. Cecil Harden
7. James E. Noland
8. Winfield K. Denton
9. *Earl Wilson
10. *Ralph Harvey
11. Andrew Jacobs

IOWA

1. *Thomas E. Martin
2. *Henry O. Talle
3. H. R. Gross
4. *Karl M. LeCompte
5. *Paul Cunningham
6. *James I. Dolliver
7. *Ben F. Jensen
8. *Charles B. Hoeven

KANSAS

1. *Albert M. Cole
2. *Errett P. Scrivener
3. *Herbert A. Meyer
4. *Edward H. Rees
5. *Clifford R. Hope
6. *Wint Smith

KENTUCKY

1. *Noble J. Gregory
2. *John A. Whitaker
3. *Thurston B. Morton
4. *Frank L. Chelf
5. *Brent Spence
6. Thomas R. Underwood
7. Carl D. Perkins
8. *Joe B. Bates
9. James S. Golden

LOUISIANA

1. *F. Edward Hébert
2. *Hale Boggs
3. Edwin E. Willis

4. *Overton Brooks
5. *Otto E. Passman
6. *James H. Morrison
7. *Henry D. Larcade, Jr.
8. *A. Leonard Allen

MAINE

1. *Robert Hale³
2. Charles P. Nelson³
3. *Frank Fellows³

MARYLAND

1. *Edward T. Miller
2. William P. Bolton
3. *Edward A. Garmatz
4. *George H. Fallon
5. *Lansdale G. Sasser
6. *J. Glenn Beall

MASSACHUSETTS

1. *John W. Heselton
2. Foster Furcolo
3. *Phillip J. Philbin
4. *Harold D. Donohue
5. *Edith Nourse Rogers
6. *George J. Bates
7. *Thomas J. Lane
8. *Angier L. Goodwin
9. *Donald W. Nicholson
10. *Christian A. Herter
11. *John F. Kennedy
12. *John W. McCormack
13. *Richard B. Wigglesworth
14. *Joseph W. Martin, Jr.

MICHIGAN

1. *George G. Sadowski
2. *Earl C. Michener
3. *Paul W. Shafer
4. *Clare E. Hoffman
5. Gerald W. Ford, Jr.
6. *William W. Blackner
7. *Jesse P. Wolcott
8. *Fred L. Crawford
9. *Albert J. Engel
10. *Roy O. Woodruff
11. *Charles E. Potter
12. *John B. Bennett
13. George D. O'Brien
14. Louis C. Rabaut
15. *John D. Dingell
16. *John Lesinski
17. *George A. Dondero

MINNESOTA

1. *August H. Andresen
2. *Joseph P. O'Hara
3. Roy W. Wier
4. Eugene J. McCarthy
5. *Walter H. Judd
6. Fred Marshall
7. *H. Carl Andersen
8. *John A. Blatnik
9. *Harold C. Hagen

MISSISSIPPI

1. *John E. Rankin
2. *Jamie L. Whitten
3. *Wm. M. Whittington
4. *Thomas G. Abernethy
5. *Arthur Winstead
6. *William M. Colmer
7. *John Bell Williams

MISSOURI

1. Clare Magee
2. Morgan Moulder
3. Phil J. Welch
4. Leonard Irving
5. Richard Bolling
6. George H. Christopher
7. *Dewey Short
8. A. S. J. Carnahan
9. *Clarence Cannon
10. Paul C. Jones
11. John B. Sullivan
12. Raymond W. Karst
13. *Frank M. Karsten

MONTANA

1. *Mike Mansfield
2. *Wesley A. D'Ewart

NEBRASKA

1. *Carl T. Curtis
2. Eugene D. O'Sullivan
3. *Karl Stefan
4. *A. L. Miller

NEVADA

At-L. Walter Baring

NEW HAMPSHIRE

1. *Chester E. Merrow
2. *Norris Cotton

NEW JERSEY

1. *Charles A. Wolvertton
2. *T. Millet Hand
3. *James C. Auchincloss
4. Charles R. Howell
5. *Charles A. Eaton
6. *Clifford P. Case
7. *J. Parnell Thomas
8. *Gordon Canfield
9. *Harry L. Towe
10. Peter W. Rodino, Jr.
11. Hugh J. Addonizio
12. *Robert W. Kean
13. *Mary T. Norton
14. *Edward J. Hart

NEW MEXICO

At-L. *A. M. Fernandez
At-L. John E. Miles

NEW YORK

1. *W. Kingsland Macy
2. *Leonard W. Hall
3. *Henry J. Latham
4. L. Gary Clemente
5. T. Vincent Quinn

6. James J. Delaney
7. *John J. Delaney
8. *Joseph L. Pjetfer
9. *Eugene J. Keogh
10. *Andrew L. Somers
11. *James J. Heffernan
12. *John J. Rooney
13. *Donald L. O'Toole
14. *Abraham J. Multer
15. *Emanuel Celler
16. James J. Murphy
17. *Frederic Coudert, Jr.
18. *VITO MARCANTONIO
19. *Arthur G. Klein
20. *Sol Bloom
21. *Jacob K. Javits
22. *Adam C. Powell, Jr.
23. *Walter A. Lynch
24. Isidore Dollinger
25. *Charles A. Buckley
26. Christopher C. McGrath
27. *Ralph W. Gwinn
28. *Ralph A. Gamble
29. *Katharine St. George
30. *Jay LeFevre
31. *Bernard W. Kearney
32. *William T. Byrne
33. *Dean P. Taylor
34. *Clarence E. Kilburn
35. John C. Davies
36. *R. Walter Riehlman
37. *Edwin A. Hall
38. *John Taber
39. *W. Sterling Cole
40. *Kenneth B. Keating
41. *James W. Wadsworth
42. William L. Pfeiffer
43. Anthony F. Tauriello
44. Chester C. Gorski
45. *Daniel A. Reed

NORTH CAROLINA

1. *Herbert C. Bonner
2. *John H. Kerr
3. *Graham A. Barden
4. *Harold D. Cooley
5. Thurmond Chatham
6. *Carl T. Durham
7. F. Ertel Carlyle
8. *Charles B. Deane
9. *Robert L. Doughton
10. *Hamilton C. Jones
11. *Alfred L. Bulwinkle
12. *Monroe M. Redden

NORTH DAKOTA

At-L. *William Lemke
At-L. Usher L. Burdick

OHIO

1. *Charles H. Elston
2. Earl T. Wagner
3. Edward Breen
4. *William M. McCulloch
5. *Cliff Clevenger
6. James G. Polk
7. *Clarence J. Brown

8. *Frederick C. Smith
 9. Thomas H. Burke
 10. *Thomas A. Jenkins
 11. *Walter E. Brehm
 12. *John M. Vorys
 13. *Alvin F. Welchel
 14. *Walter B. Huber
 15. Robert T. Secrest
 16. John McSweeney
 17. *J. Harry McGregor
 18. Wayne L. Hays
 19. *Michael J. Kirwan
 20. *Michael A. Feighan
 21. *Robert Crosser
 22. *Frances P. Bolton
- At-L. Stephen M. Young

OKLAHOMA

1. Dixie Gilmer
2. *William G. Stigler
3. *Carl Albert
4. Tom Steed
5. *A. S. Mike Monroney
6. *Toby Morris
7. Victor Wickersham
8. George H. Wilson

OREGON

1. *Walter Norblad
2. *Lowell Stockman
3. *Homer D. Angell
4. *Harris Ellsworth

PENNSYLVANIA

1. William A. Barrett
2. William T. Granahan
3. *Hardie Scott
4. Earl Shudoff
5. William J. Green, Jr.
6. *Hugh D. Scott, Jr.
7. Benjamin F. James
8. *F. H. Lichtenwalter
9. *Paul B. Dague
10. Harry P. O'Neill
11. Daniel J. Flood
12. *Ivor D. Fenton
13. George M. Rhodes
14. *Wilson D. Gillette
15. *Robert F. Rich
16. *Samuel K. McConnell, Jr.
17. *Richard M. Simpson
18. *John C. Kunkel
19. *Leon H. Gavin
20. *Francis E. Walter
21. James F. Lind
22. *James E. Van Zandt
23. Anthony Cavalcante
24. *Thomas E. Morgan
25. *Louis E. Graham
26. Robert L. Coffey, Jr.
27. *Augustine B. Kelley
28. *Carroll D. Kearns
29. Harry J. Davenport
30. *Robert J. Corbett
31. *James G. Fulton
32. *Herman P. Eberharter
33. *Frank Buchanan

House of Representatives—(cont.)

RHODE ISLAND

1. *Aime J. Forand
2. *John E. Fogarty

SOUTH CAROLINA

1. *L. Mendel Rivers
2. Hugo S. Sims, Jr.
3. James B. Hare
4. *Joseph R. Bryson
5. *James P. Richards
6. *John L. McMillan

SOUTH DAKOTA

1. Harold O. Lovre
2. *Francis Case

TENNESSEE

1. *Dayton E. Phillips
2. *John E. Jennings, Jr.
3. James B. Frazier
4. *Albert Gore
5. *Joe L. Evins
6. *J. Percy Priest
7. Pat Sutton
8. *Tom Murray
9. *Jere Cooper
10. *Clifford Davis

TEXAS

1. *Wright Patman
2. *J. M. Combs
3. *Lindley Beckworth
4. *Sam Rayburn
5. *J. Frank Wilson
6. *Olin E. Teague
7. *Tom Pickett

8. *Albert Thomas
9. *Clark W. Thompson
10. Homer Thornberry
11. *W. R. Poage
12. *Wingate H. Lucas
13. *Ed Gossett
14. *John E. Lyle, Jr.
15. Lloyd M. Bentsen, Jr.
16. *Ken Regan
17. *Omar Burleson
18. *Eugene Worley
19. *George H. Mahon
20. *Paul J. Kilday
21. *O. C. Fisher

UTAH

1. *Walter K. Granger
2. Reva Beck Bosone

VERMONT

- At-L. *Charles A. Plumley

VIRGINIA

1. *Schuyler Otis Bland
2. *Porter Hardy, Jr.
3. *J. Vaughan Gary
4. *Watkins M. Abbitt
5. *Thomas B. Stanley
6. Clarence G. Burton
7. *Burr P. Harrison
8. *Howard W. Smith
9. Thomas B. Fugate

WASHINGTON

1. Hugh B. Mitchell
2. *Henry M. Jackson
3. *Russell V. Mack

4. *Hal Holmes
5. *Walt Horan
6. *Thor C. Tollefson

WEST VIRGINIA

1. Robert L. Ramsay
2. Harley O. Staggers
3. Cleveland M. Bailey
4. M. G. Burnside
5. *John Kee
6. *E. H. Hedrick

WISCONSIN

1. *Lawrence H. Smith
2. *Glenn R. Davis
3. Gardner R. Withrow
4. Clement J. Zablocki
5. Andrew J. Biemiller
6. *Frank B. Keefe
7. *Reid F. Murray
8. *John W. Byrnes
9. *Merlin Hull
10. *Alvin E. O'Konski

WYOMING

- At-L. *Frank A. Barrett

ALASKA

- Deleg. E. L. Bartlett*

HAWAII

- Deleg. J. R. Farrington*

PUERTO RICO

- Res. Com. A. Fernos-Isern*

*For the 1948 election, Arizona was divided into two Congressional Districts. Previously, two congressmen were elected at-large. *For the 1948 election, Illinois was redivided into 26 Congressional Districts. Previously the state had 25 districts, and one congressman was elected at-large. *Elected in state election of Sept. 13, 1948. *Does not have a vote.

Congressional Committees

Source: Congressional Directory.

Under the Legislative Reorganization Act of 1946, the number of standing committees of the Senate was reduced from thirty-three to fifteen, and committees of the House of Representatives from forty-five to nineteen. This reduction became effective January 3, 1947, the opening date of the 80th Congress.

Committees	Members		Committees	Members	
	S	H		S	H
Agriculture .....	..	30	Interstate and Foreign Commerce	13	2
Agriculture and Forestry	13	..	Judiciary	13	2
Appropriations	21	43	Labor and Public Welfare	13	..
Armed Services	13	36	Merchant Marine and Fisheries .....	..	2
Banking and Currency	13	27	P. O. and Civil Service .....	..	2
Civil Service	13	..	Public Lands	13	2
District of Columbia	13	25	Public Works	13	2
Education and Labor .....	..	25	Rules .....	..	1
Expenditures in Exec. Dept.'s ..	13	25	Rules and Administration	13	..
Finance	13	..	Un-American Activities .....	..	..
Foreign Affairs .....	..	25	Veterans' Affairs .....	..	2
Foreign Relations	13	..	Ways and Means .....	..	2
House Administration .....	..	25			

Presidents and Vice Presidents of the U. S.

Source: Congressional Directory.

Beginning of term	Presidents and (parties) ¹	Died in office	Vice Presidents	Vacated office ²
Apr. 30, 1789	1. George Washington ³		1. John Adams	
Mar. 4, 1793	George Washington (F)		John Adams	
Mar. 4, 1797	2. John Adams (F)		2. Thomas Jefferson (D-R)	
Mar. 4, 1801	3. Thomas Jefferson (D-R)		3. Aaron Burr	
Mar. 4, 1805	Thomas Jefferson (D-R)		4. George Clinton	
Mar. 4, 1809	4. James Madison (D-R)		George Clinton	Apr. 20, 1812 (D)
Mar. 4, 1813	James Madison (D-R)		5. Elbridge Gerry	Nov. 23, 1814 (D)
Mar. 4, 1817	5. James Monroe (D-R)		6. Daniel D. Tompkins	
Mar. 4, 1821	James Monroe (D-R)		Daniel D. Tompkins	
Mar. 4, 1825	6. John Q. Adams (D-R)		7. John C. Calhoun	
Mar. 4, 1829	7. Andrew Jackson (D)		John C. Calhoun	Dec. 28, 1832 (R) ⁴
Mar. 4, 1833	Andrew Jackson (D)		8. Martin Van Buren	
Mar. 4, 1837	8. Martin Van Buren (D)		9. Richard M. Johnson	
Mar. 4, 1841	9. William H. Harrison (W)	Apr. 4, 1841	10. John Tyler	Apr. 6, 1841 (S)
	10. John Tyler (W)			
Mar. 4, 1845	11. James K. Polk (D)		11. George M. Dallas	
Mar. 5, 1849 ⁵	12. Zachary Taylor (W)	July 9, 1850	12. Millard Fillmore	July 10, 1850 (S)
	13. Millard Fillmore (W)			
Mar. 4, 1853	14. Franklin Pierce (D)		13. William R. King	Apr. 18, 1853 (D)
Mar. 4, 1857	15. James Buchanan (D)		14. John C. Breckinridge	
Mar. 4, 1861	16. Abraham Lincoln (R)		15. Hannibal Hamlin	
Mar. 4, 1865	Abraham Lincoln (R)	Apr. 15, 1865 ⁶	16. Andrew Johnson	Apr. 15, 1865 (S)
	17. Andrew Johnson (R)			
Mar. 4, 1869	18. Ulysses S. Grant (R)		17. Schuyler Colfax	
Mar. 4, 1873	Ulysses S. Grant (R)		18. Henry Wilson	Nov. 22, 1875 (D)
Mar. 4, 1877	19. Rutherford B. Hayes (R)		19. William A. Wheeler	
Mar. 4, 1881	20. James A. Garfield (R)	Sept. 19, 1881 ⁷	20. Chester A. Arthur	Sept. 20, 1881 (S)
	21. Chester A. Arthur (R)			
Mar. 4, 1885	22. Grover Cleveland (D)		21. Thomas A. Hendricks	Nov. 25, 1885 (D)
Mar. 4, 1889	23. Benjamin Harrison (R)		22. Levi P. Morton	
Mar. 4, 1893	Grover Cleveland (D)		23. Adlai E. Stevenson	
Mar. 4, 1897	24. William McKinley (R)		24. Garret A. Hobart	Nov. 21, 1899 (D)
Mar. 4, 1901	William McKinley (R)	Sept. 14, 1901 ⁸	25. Theodore Roosevelt	Sept. 14, 1901 (S)
	25. Theodore Roosevelt (R)			
Mar. 4, 1905	Theodore Roosevelt (R)		26. Charles W. Fairbanks	
Mar. 4, 1909	26. William H. Taft (R)		27. James S. Sherman	Oct. 30, 1912 (D)
Mar. 4, 1913	27. Woodrow Wilson (D)		28. Thomas R. Marshall	
Mar. 4, 1917	Woodrow Wilson (D)		Thomas R. Marshall	
Mar. 4, 1921	28. Warren G. Harding (R)	Aug. 2, 1923	29. Calvin Coolidge	Aug. 3, 1923 (S)
	29. Calvin Coolidge (R)			
Mar. 4, 1925	Calvin Coolidge (R)		30. Charles G. Dawes	
Mar. 4, 1929	30. Herbert Hoover (R)		31. Charles Curtis	
Mar. 4, 1933	31. Franklin D. Roosevelt (D)		32. John N. Garner	
Mar. 4, 1937	Franklin D. Roosevelt (D)		John N. Garner	
Jan. 20, 1941	Franklin D. Roosevelt (D)		33. Henry A. Wallace	
Jan. 20, 1945	Franklin D. Roosevelt (D)	Apr. 12, 1945	34. Harry S. Truman	Apr. 12, 1945 (S)
	32. Harry S. Truman (D)			
Jan. 20, 1949	Harry S. Truman (D)		35. Alben W. Barkley	

¹F—Federalist; D-R—Democratic-Republican; D—Democratic; W—Whig; R—Republican. ²D—died in office; S—succeeded to Presidency at death of President; R—resigned. ³No party. The party system in the U. S. made its formal appearance during Washington's first term. ⁴Resigned to become U. S. Senator. ⁵As Mar. 4 was a Sunday, the inauguration was held the next day. ⁶Shot Apr. 14 by John Wilkes Booth. ⁷Shot July 2 by Charles J. Guiteau. ⁸Shot Sept. 6 by Leon F. Ozolgosz.

The Proposed Twenty-Second Amendment

On Mar. 26, 1947, Congress approved and sent to the states a proposal for a 22nd amendment to the Constitution which would limit to two the number of terms which any person could serve as President of the U. S. To become an amendment, the proposal must be ratified by three-quarters

of the states. Twenty-one states had ratified it as of Nov., 1948: California, Colorado, Connecticut, Delaware, Illinois, Iowa, Kansas, Maine, Michigan, Mississippi, Missouri, Nebraska, New Hampshire, New Jersey, New York, Ohio, Oregon, Pennsylvania, Vermont, Virginia, and Wisconsin.

BIOGRAPHIES OF THE PRESIDENTS

by PROFESSOR ARTHUR M. SCHLESINGER, JR.

Associate Professor of History, Harvard University

Author of the Pulitzer Prize winning Age of Jackson

GEORGE WASHINGTON

was born on February 22 (February 11, old style), 1732, in Westmoreland County, Virginia. His early training was as a surveyor; but in 1752 he was appointed adjutant in the Virginia militia, and for the next three years he took an active part in the wars against the French and Indians, serving as General Braddock's aide in the disastrous campaign against Fort Duquesne. In 1759 he resigned from the militia, married Martha Dandridge Custis, a widow, and settled down as a gentleman farmer at Mount Vernon.

As a militiaman, he had been exposed to the arrogance of the British officers, and his experience as a planter with British commercial restrictions increased his anti-British sentiment. He opposed the Stamp Act of 1765 and after 1770 became increasingly prominent in organizing resistance. A delegate to the Continental Congress, Washington was selected as commander in chief of the Continental Army and took command at Cambridge, Massachusetts, on July 3, 1775.

Inadequately supported and sometimes covertly sabotaged by the Congress, in charge of troops who were inexperienced, badly equipped and impatient of discipline, Washington conducted the war on the policy of avoiding major engagements with the British and wearing them down by harassing tactics. His able generalship, along with the French alliance and the growing weariness within Britain, brought the war to a conclusion with the surrender of Cornwallis at Yorktown on October 19, 1781.

The chaotic years under the Articles of Confederation led Washington to return to public life in the hope of promoting the formation of a strong central government. He presided over the Constitutional Convention and yielded to the universal demand that he serve as first President. In office, he sought to unite the nation in the service of establishing the authority of new government at home and abroad. Greatly distressed by the emergence of the Hamilton-Jefferson rivalry, he worked to maintain neutrality but actually sympathized more with Hamilton. Following his unanimous re-election in 1792, his second term was dominated by the Federalists. His Farewell Address rebuked party spirit and warned against foreign entanglements.

He died at Mt. Vernon on December 14, 1799. Tall, dignified and impressive, Washington gave a public impression of austerity, though he was capable of gaiety in

private. His life was characterized by a strict sense of duty to his people. The standard biographies are by Fitzpatrick, Ford, Hughes and Stephenson.

JOHN ADAMS

was born on October 30 (October 19, old style), 1735, at Braintree (now Quincy), Massachusetts. A Harvard graduate, he considered teaching and the ministry but finally turned to law and was admitted to the bar in 1758. He opposed the Stamp Act, served as lawyer for patriots indicted by the British and, by the time of the Continental Congresses, was in the vanguard of the movement for independence. In 1778 he went to France as commissioner. Subsequently he helped negotiate the peace treaty with Britain, and in 1785 became the U. S. envoy to London. Resigning in 1788, he was elected Vice President under Washington, and was re-elected in 1792.

Though a Federalist, Adams did not get along with Hamilton who sought to prevent his election to the presidency in 1796, and thereafter intrigued against his administration. Adams was chosen with 71 electoral votes to 68 for his closest competitor, Thomas Jefferson, who became Vice President. In 1798 Adams' independent policy averted a war with France but completed the break with Hamilton and the right-wing Federalists while, at the same time, the enactment of the Alien and Sedition Acts, directed against foreigners and against critics of the government, exasperated the Jeffersonian opposition. The split between Adams and Hamilton elected Jefferson in 1800. Adams retired to his home in Quincy, Massachusetts. He later corresponded with Jefferson and they died on the same day, July 4, 1826.

Stout, somewhat vain and irascible, Adams was honest, fearless and essentially fair-minded. His *Defence of the Constitutions of Government of the United States* (1787) contains original and striking conservative political ideas. He married Abigail Smith in 1764, and their life together was long and happy. The standard biographies are by Morse and Chinard.

THOMAS JEFFERSON

was born on April 13 (April 2, old style) 1743, at Shadwell in Goochland (now Albemarle) County, Virginia. A William and Mary graduate, he studied law but from the start showed an interest in science and philosophy. His literary skill and political clarity brought him to the

forefront of the revolutionary movement in Virginia. As delegate to the Continental Congress, he drafted the Declaration of Independence. In 1776 he entered the Virginia House of Delegates and initiated a comprehensive reform program for the abolition of feudal survivals in land tenure and the separation of church and state.

In 1779 he became governor, but constitutional limitations on his power combined with his own lack of executive energy caused an unsatisfactory administration, culminating in Jefferson's virtual abdication when the British invaded Virginia in 1781. He now retired to his beautiful home at Monticello, to his wife, Martha Wayles Skelton, whom he had married in 1772 and who died in 1782, and to his children.

Jefferson's *Notes on Virginia* (1784-85) illustrate his many-faceted interests, his limitless intellectual curiosity, his deep faith in agrarian democracy. Sent to Congress in 1783, he helped lay down the decimal system and drafted basic reports on the organization of the western lands. In 1785 he was appointed minister to France, where the Anglo-Saxon liberalism he had drawn from Locke was stimulated by contact with the thought which would soon ferment in the French Revolution. In 1789 Washington appointed him Secretary of State. While favoring the Constitution and a strengthened central government, Jefferson came to believe that Hamilton contemplated the establishment of a monarchy. Growing differences resulted in Jefferson's resignation on Dec. 31, 1793.

Elected Vice President in 1796, Jefferson continued to serve as spiritual leader of the opposition to Federalism, particularly to the repressive Alien and Sedition Acts. He was elected President in 1801 by the House of Representatives as a result of Hamilton's decision to throw the Federalist votes to him rather than to Aaron Burr, who had tied him in electoral votes. The purchase of Louisiana from France in 1803, though in violation of his earlier constitutional scruples, was the most notable act of his administration. Re-elected in 1804 with 162 electoral votes to 14 for the Federalist Charles C. Pinckney, Jefferson tried desperately during his second term to keep the United States out of the Napoleonic Wars in Europe, employing to this end the unpopular embargo policy.

After his retirement to Monticello in 1809, he developed his interest in education, founding the University of Virginia and watching its development with never-flagging interest. He died at Monticello on July 4, 1826. Tall, loose-jointed, a poor speaker, Jefferson had an enormous variety of interests and skills, ranging from education and science to architecture and music. Economically his conception of democracy presupposed an essentially rural

community of small freeholds; but his deep and abiding faith in the common man provides inspiration for future generations. The standard biographies are by Chinard, Bowers, Kimball, Randall and Malone.

JAMES MADISON

was born in Port Conway, Virginia, on March 16 (March 5, old style), 1751. A Princeton graduate, he threw himself into the struggle for independence on his return to Virginia in 1771. In the seventies and eighties he was active both in state politics, where he championed the Jefferson reform program, and in the Continental Congress. He was influential in the Constitutional Convention as leader of the group favoring a strong central government and as recorder of the debates; and he subsequently wrote, in collaboration with Alexander Hamilton and John Jay, the *Federalist* papers to aid the campaign for the adoption of the Constitution.

In the new Congress, Madison soon emerged as the leader in the House of the men who opposed Hamilton's financial program and his pro-British leanings in foreign policy. Retiring from Congress in 1797, he continued active in Virginia and drafted the Virginia Resolution protesting the Alien and Sedition Acts. His intimacy with Jefferson made him natural choice for Secretary of State in 1801.

In 1809 Madison succeeded Jefferson as President, with 122 electoral votes to 47 for the Federalist, C. C. Pinckney, and 6 scattering. His attractive wife, Dolly Payne Todd, whom he married in 1794, brought a new social sparkle to the executive mansion. In the meantime, increasing tension with Britain culminated in the War of 1812—a war for which the United States was unprepared, and for which Madison lacked the executive talent to clear out incompetence and mobilize the nation's energies. Madison was re-elected in 1812, with 128 electoral votes to 89 for the Federalist, De Witt Clinton. In 1814 the British actually captured Washington and forced Madison to flee to Virginia.

In his domestic program, Madison capitulated to the Hamiltonian policies that he had resisted twenty years before, signing bills to establish a United States Bank and a higher tariff. Following his presidency, he remained in retirement in Virginia until his death on June 28, 1836. Small, wrinkled, unimpressive, Madison had an acute political intelligence but lacked executive force. The standard lives are by Hunt, Brant and Rives.

JAMES MONROE

was born on April 28, 1758, in Westmoreland County, Virginia. A William and Mary graduate, he served in the army dur-

ing the first years of the Revolution and was wounded at Trenton. He then entered Virginia politics and later national politics under the sponsorship of Jefferson. In 1786 he married Eliza Kortright.

Fearing centralization, Monroe opposed the adoption of the Constitution and, as senator from Virginia, was highly critical of the Hamiltonian program. In 1794 he was appointed minister to France where his ardent sympathies with the Revolution exceeded the wishes of the State Department. A troubled diplomatic career ended with his recall in 1796. From 1799 to 1802 he was governor of Virginia. In 1803 Jefferson sent him to France to help negotiate the Louisiana Purchase and for the next few years he was active in various continental negotiations.

In 1808 Monroe flirted with the radical wing of the Republican party, which opposed Madison's candidacy; but the presidential boom came to naught and, after a brief term as governor of Virginia in 1811, Monroe accepted Madison's offer of the State Department. During the war he vainly sought a field command and served as Secretary of War from Sept., 1814, to Mar., 1815.

Elected President in 1816 with 183 electoral votes to 34 for the Federalist Rufus King, and re-elected without opposition in 1820, Monroe, the last of the Virginia dynasty, pursued the course of systematic tranquilization which won for his terms the name "the era of good feeling." He continued Madison's surrender to the Hamiltonian domestic program, signed the Missouri Compromise, acquired Florida and, with the able assistance of his Secretary of State, John Quincy Adams, promulgated the Monroe Doctrine in 1823, declaring against foreign colonization or intervention in the Americas. He died in New York City on July 4, 1831.

A sound man of medium abilities, Monroe possessed qualities of judgment rather than of leadership. The standard biographies are by Morgan, Gilman and Styron.

JOHN QUINCY ADAMS

was born on July 11, 1767, at Braintree (now Quincy), Massachusetts, the son of John Adams. He spent his early years in Europe with his father, graduated from Harvard and entered law practice. His anti-Jeffersonian newspaper articles won him political attention. In 1794 he became minister to the Netherlands, the first of several diplomatic posts which occupied him until his return to Boston in 1801. In 1797 he married Louisa Catherine Johnson.

In 1803 he was elected to the Senate, nominally as a Federalist, but his repeated displays of independence on such issues as the Louisiana Purchase and the embargo caused his party to compel his resignation

and ostracize him socially. In 1809 Madison rewarded him for his support of Jefferson by appointing him minister to St. Petersburg. He helped negotiate the Treaty of Ghent in 1814 and in 1815 became minister to London. In 1817 Monroe appointed him Secretary of State where he served with great distinction, gaining Florida from Spain without hostilities and playing an equal part with Monroe in formulating the Monroe Doctrine.

When no presidential candidate received a majority of electoral votes in 1824, Adams, with the support of Henry Clay, was elected by the House in 1825 over Andrew Jackson who had the original plurality. Adams had ambitious plans of government activity to foster internal improvements and promote the arts and sciences; but congressional obstructionism combined with his own unwillingness or inability to play the role of a politician meant that little was accomplished. Retiring to Quincy after his defeat in 1828, he was elected to the House of Representatives in 1831 where, though nominally a Whig, he pursued as ever an independent course. He led the fight to force Congress to receive anti-slavery petitions and fathered the Smithsonian Institution.

Stricken on the floor of the House, he died on February 23, 1848. Tactless, brusque, conscientious, a rough and savage debater, Adams spared neither himself nor his enemies. His long and detailed *Diary* gives a unique picture of the personalities and politics of the times. The standard biographies are by Morse and Clark.

ANDREW JACKSON

was born on March 15, 1767, in what is now generally agreed to be Waxhaw, South Carolina. After a turbulent boyhood as an orphan and a British prisoner, he moved west to Tennessee where he soon qualified for law practice but found time for such frontier pleasures as horse racing, cock fighting and dueling. His marriage to Rachel Donelson Robards in 1791 was complicated by subsequent legal uncertainties about the status of her divorce. During the seventeen-nineties Jackson served in the Tennessee constitutional convention, the federal House of Representatives, the federal Senate and the Tennessee supreme court.

After some years as a country gentleman, living at the Hermitage near Nashville, Jackson in 1812 was given command of Tennessee troops sent against the Creeks. He defeated the Indians at Horseshoe Bend in 1814; subsequently he became a major general and won the Battle of New Orleans over veteran British troops though after the treaty of peace had been signed at Ghent. In 1818 General Jackson invaded Florida, captured Pensa-

cola and hanged two Englishmen named Arbuthnot and Ambrister, creating an international incident. A presidential boom began for him in 1821 and in its service he returned to the Senate (1823-25). Though he won a plurality of electoral votes in 1824, he lost in the House when Clay threw his strength to Adams; he won easily in 1828 by an electoral vote of 178 to 83.

As President, Jackson greatly expanded the power and prestige of the presidential office and carried through an unexampled program of domestic reform, vetoing the bill to extend the United States Bank, moving toward a hard-money currency policy and checking the program of federal internal improvements. He also vindicated federal authority against South Carolina with its doctrine of nullification and against France on the question of debts. The support given his policies by the workmen of the East as well as by the farmers of the East, West and South resulted in his triumphant re-election in 1832 over Clay by an electoral vote of 219 to 49, with 18 scattering and 2 not cast.

After watching the inauguration of his hand-picked successor, Martin Van Buren, Jackson retired to the Hermitage where he maintained a lively interest in national affairs until his death on June 8, 1845. A tall, dignified man with a drawn and wrinkled face, Jackson has been endowed by partisan historians with a violence and irascibility he appears not to have possessed. His great contribution was to adjust the presidential office and the democratic doctrines of Jefferson to the new situation created by the Industrial Revolution. The standard biographies are by James, Bassett and Parton.

MARTIN VAN BUREN

was born on December 5, 1782, at Kinderhook, New York. After graduating from the village school, he became a law clerk, entered practice in 1803 and soon became active in state politics as state senator and attorney general. In 1821 he was elected to the United States Senate. He threw the support of his efficient political organization, known as the Albany Regency, to William H. Crawford in 1824 and to Jackson in 1828. After leading the opposition to Adams' administration in the Senate, he served briefly as governor of New York and resigned to become Jackson's Secretary of State. He soon became on close personal terms with Jackson and played an important part in turning the Jacksonian program from the lines intended by his original Western backers.

In 1832 Van Buren became Vice President; in 1836, President, with an electoral vote of 170 against 124 scattered among four opponents. The Panic of 1837 over-

shadowed his term. He attributed it to the overexpansion of the credit and favored the establishment of an independent treasury as repository for the federal funds. In 1840 he established a ten-hour day on public works. Defeated by Harrison in 1840, he was the leading contender for the Democratic nomination in 1844 until he publicly opposed immediate annexation of Texas and was subsequently beaten by the Southern delegations at the Baltimore convention. This incident increased his growing misgivings about the slave power.

After working behind the scenes among the antislavery Democrats, Van Buren joined in the movement which led to the Free-Soil party and became its candidate for President in 1848. He subsequently returned to the Democratic party while continuing to object to its pro-Southern policy. He died in Kinderhook on July 24, 1862. His *Autobiography* throws valuable sidelights on the political history of the times.

Small, erect, dapper, Van Buren had a reputation for slick politicking which won him such sobriquets as the Little Magician and the Red Fox of Kinderhook; but, as his later career showed, he was capable of taking firm and unpopular stands on public issues. His wife Hannah Hoes, whom he married in 1807, died in 1819.

The standard biographies are by Shepard and Lynch.

WILLIAM HENRY HARRISON

was born in Charles City County, Virginia, on February 9, 1773. Joining the army in 1791, he was active in Indian fighting in the Northwest, became secretary of the Northwest Territory in 1798 and governor of Indiana in 1800. He married Anna Symmes in 1795. Growing discontent over white encroachments on Indian lands led to the formation of an Indian alliance under Tecumseh to resist further aggressions. In 1811 Harrison won a nominal victory over the Indians at Tippecanoe and in 1813 a more decisive one at the Battle of the Thames, where Tecumseh was killed.

After resigning from the army in 1814, Harrison had an obscure career in politics and diplomacy, ending up in twenty years as a county recorder in Ohio. Nominated for President in 1835 as a military hero whom the conservative politicians hoped to be able to control, he ran surprisingly well against Van Buren in 1836. Four years later he defeated Van Buren by an electoral vote of 234 to 60 but caught pneumonia and died in Washington a month after his inauguration, April 4, 1841. Harrison's qualities were those of a soldier rather than of a statesman or political leader. The standard biographies are by Cleaves and Goebel.

JOHN TYLER

was born in Charles City County, Virginia, on March 29, 1790. A William and Mary graduate, he entered law practice and politics, serving in the House of Representatives (1816-21) and later as governor of Virginia (1825-27), and as senator. A thorough-going strict constructionist, he supported Crawford in 1824 and Jackson in 1828 but broke with Jackson over his Bank policy and became a member of the Southern state-rights group which cooperated with the Whigs. In 1836 he resigned from the Senate rather than follow instructions from the Virginia legislature to vote for a resolution expunging censure of Jackson from the Senate record.

Elected Vice President on the Whig ticket in 1840, Tyler succeeded to the presidency on Harrison's death. His strict-constructionist views soon caused a split with the Henry Clay wing of the Whig party and a stalemate on domestic questions. Tyler's more considerable achievements were his support of the Webster-Ashburton Treaty with Britain and his success in bringing about the annexation of Texas through joint congressional resolution.

After his presidency he lived in retirement in Virginia until the outbreak of the Civil War when he emerged briefly as chairman of a peace convention and then as delegate to the provisional Congress of the Confederacy. He died on January 18, 1862. He was married first to Letitia Christian March in 1813 and, two years after her death in 1842, to Julia Gardiner. Witty, amiable, courteous, Tyler was a Virginia gentleman whose presidency was hamstrung by the basic contradiction between his own ideas and those of the party which put him on the ticket as Vice President. The standard biographies are by Chitwood and Tyler.

JAMES KNOX POLK

was born in Mecklenburg County, North Carolina, on November 2, 1795. A graduate of the University of North Carolina, he moved west to Tennessee, was admitted to the bar and soon became prominent in state politics. In 1825 he was elected to the House of Representatives where he opposed Adams and, after 1829, became Jackson's floor leader in the fight against the Bank. In 1835 he became Speaker of the House. In 1839 he was elected governor of Tennessee but was beaten in tries for re-election in 1841 and 1843.

The supporters of Van Buren for the Democratic nomination in 1844 counted on Polk as his running mate; but, when Van Buren's stand on Texas alienated Southern support, the convention swung to Polk on the ninth ballot. He was elected over Henry Clay, the Whig candidate, by an

electoral vote of 170 to 105. Rapidly disillusioning those who thought that he would not run his own administration, Polk proceeded steadily and precisely to achieve four major objectives—the acquisition of California, the settlement of the Oregon question, the reduction of the tariff and the establishment of the independent treasury. He also enlarged the Monroe Doctrine to exclude all non-American intervention in American affairs, whether forcible or not, and he forced Mexico into a war which he waged to a successful conclusion. His wife Sarah Childress, whom he married in 1824, was a woman of charm and ability. Polk died in Nashville, Tennessee, on June 15, 1849.

Serious, hardworking, lacking in color, Polk has long been underrated by historians who mistakenly regarded him as a slaveholders' puppet; in fact, few presidents have so thoroughly controlled their own administration or have so ably accomplished the purposes they set for themselves. Polk's *Diary* reflects the mood and problems of his presidency. The standard biography is by McCormac.

ZACHARY TAYLOR

was born at Montebello, Orange County, Virginia, on November 24, 1784. Embarking on a military career in 1808, Taylor fought in the War of 1812, the Black Hawk War and the Seminole War, holding in between garrison jobs on the frontier or desk jobs in Washington. A brigadier general as a result of his victory over the Seminoles at Lake Okeechobee (1837), Taylor held a succession of Southwestern commands and in 1846 established a base on the Rio Grande, where his forces engaged in hostilities which precipitated the war with Mexico. He captured Monterrey in Sept., 1846, and, disregarding Polk's orders to stay on the defensive, defeated Santa Anna at Buena Vista in February, 1847, ending the war in the northern provinces.

Though Taylor had never cast a vote for President, his party affiliations were Whiggish, and his availability was increased by his difficulties with Polk. He was elected President over the Democrat Lewis Cass by an electoral vote of 163 to 127. During the revival of the slavery controversy, which was to result in the Compromise of 1850, Taylor began to take an increasingly firm stand against appeasing the South; but he died in Washington on July 9, 1850, in the midst of the fight over the Compromise. He married Margaret Mackall Smith in 1810. His bluff and simple soldierly qualities won him the name of Old Rough and Ready. During his brief term as President he displayed a growing insight into political questions. The standard biographies are by Hamilton and by Bent and McKinley.

MILLARD FILLMORE

was born at Locke, Cayuga County, New York, on January 7, 1800. A lawyer, he entered politics as an Antimason under the sponsorship of Thurlow Weed, editor and party boss, and subsequently followed Weed into the Whig party. He served in the House of Representatives (1833-35 and 1837-43) and played a leading role in writing the tariff of 1842. Defeated for governor of New York in 1844, he became comptroller in 1848, was put on the Whig ticket with Taylor as a concession to the Clay wing of the party and became President upon Taylor's death in 1850.

As President, Fillmore broke with Weed and William H. Seward and associated himself with the pro-Southern Whigs, supporting the Compromise of 1850. Defeated for the Whig nomination in 1852, he ran for President in 1856 as candidate of the American or Know-Nothing party, which sought to unite the country against foreigners in the alleged hope of diverting it from the explosive slavery issue. Fillmore opposed Lincoln during the Civil War. He died in Buffalo on March 8, 1874. He was married in 1826 to Abigail Powers, who died in 1853, and in 1858 to Caroline Carmichael McIntosh. Urbane, gracious, colorless and weak, Fillmore was an undistinguished President. The standard biography is by Griffis.

FRANKLIN PIERCE

was born at Hillsboro, New Hampshire, on November 23, 1804. A Bowdoin graduate and lawyer, he won rapid political advancement in the Democratic party, in part because of the prestige of his father, Governor Benjamin Pierce. By 1831 he was Speaker of the New Hampshire House of Representatives; from 1833 to 1837 he served in the federal House and from 1837 to 1842 in the Senate. His wife, Jane Means Appleton, whom he had married in 1834, disliked Washington and the somewhat dissipated life led by Pierce; and in 1842 Pierce, resigning from the Senate, took up a successful law practice in Concord, New Hampshire.

During the Mexican War Pierce was a brigadier general. Thereafter he continued to oppose antislavery tendencies within the Democratic party. As a result, he was the Southern choice to break the deadlock at the Democratic convention of 1852 and was nominated on the 49th ballot. Pierce rolled up 254 electoral votes to 42 for Winfield Scott, the Whig candidate.

As President, Pierce followed a course of appeasing the South at home and of playing with schemes of territorial expansion abroad. The failure of both his foreign and domestic policies prevented his renomination; and he died in Concord, New Hampshire, on October 8, 1869, in relative ob-

scurity. A kindly and courteous person, Pierce was weak, unstable and lacking in presidential qualities. The standard biography is by Nichols.

JAMES BUCHANAN

was born near Mercersburg, Pennsylvania, on April 23, 1791. A Dickinson graduate and a lawyer, he entered Pennsylvania politics as a Federalist. With the disappearance of the Federalist party, he became a Jacksonian Democrat. He served with ability in the House (1821-31), as minister to St. Petersburg (1832-33) and in the Senate (1834-45), and in 1845 became Polk's Secretary of State. Disappointed in the presidential nomination in 1852, Buchanan became minister to Britain in 1853 where he participated with other American diplomats in Europe in drafting the expansionist Ostend Manifesto.

In 1856 Buchanan received the Democratic nomination and won the election, gaining 174 electoral votes to 114 for John C. Frémont, the Republican candidate, and 8 for Millard Fillmore, American party. The growing crisis over slavery presented Buchanan with problems he lacked the will to tackle. His appeasement of the South alienated the Stephen Douglas wing of the Democratic party without reducing Southern militancy on slavery issues. While denying the right of secession, Buchanan also denied that the federal government could do anything about it. He supported the administration during the Civil War and died in Lancaster, Pennsylvania, on June 1, 1868.

The only President to remain a bachelor throughout his term, Buchanan used his charming niece Harriet Lane as White House hostess. Legalistic, indecisive and timorous as President, Buchanan filled his other public offices capably. The standard biography is by Curtis.

ABRAHAM LINCOLN

was born in Hardin (now Larue) County, Kentucky, on February 12, 1809. His family moved to Indiana and then to Illinois, and Lincoln gained what education he could along the way. While reading law, he worked in a store, managed a mill, surveyed, and split rails. In 1834 he went to the state legislature as a Whig and became the party's floor leader. For the next twenty years he remained in law practice in Springfield, except for a single term (1847-49) in Congress where he denounced the Mexican War. In 1855 he was a candidate for senator and in 1856 he joined the new Republican party.

A leading but unsuccessful candidate for the vice-presidential nomination with Frémont, Lincoln gained national attention in 1858 when, as Republican candidate for

senator from Illinois, he engaged in a series of debates with Stephen A. Douglas, the Democratic candidate. He lost the senatorial election, but continued to prepare the way for the 1860 Republican convention and was rewarded with the presidential nomination on the third ballot. He polled 180 electoral votes, as against the 123 of his three opponents, but had only a plurality of the popular vote.

From the start, Lincoln made clear that, unlike Buchanan, he believed the national government had the power to crush the rebellion. Not an abolitionist, he held the slavery issue subordinate to that of preserving the Union but soon perceived that the war could not be brought to a successful conclusion without freeing the slaves. His administration was hampered by the incompetence of many Union generals, the inexperience of the troops and the harassing political tactics both of the Republican Radicals, who favored a hard policy toward the South, and the Democratic Copperheads, who desired a negotiated peace. The Gettysburg Address of November 19, 1863, marks the high point in the record of American eloquence. His patient search for a winning combination finally brought Generals Ulysses S. Grant and William T. Sherman to the top; and their series of victories in 1864 dispelled the mutterings from both Radicals and Peace Democrats which at one time seemed to threaten Lincoln's re-election. He received 212 electoral votes to 21 for George B. McClellan, the Democratic candidate. His inaugural address urged leniency toward the South: "With malice toward none, with charity for all . . . let us strive on to finish the work we are in; to bind up the nation's wounds . . ." This policy aroused growing opposition on the part of the Republican Radicals, but Lincoln was shot by John Wilkes Booth at Ford's Theater, Washington, on April 14, 1865, before the matter could be put to test. He died the following day.

Lincoln's marriage to Mary Todd in 1842 was often unhappy and turbulent, in part because of his wife's pronounced instability. By his remarkable literary artistry, his essential patience and devotion, his profound sense of the importance of government by, for and of the people, by the manner of his life and of his death, Lincoln has won a unique place in the hearts of Americans. The standard biographies are by Sandburg, Herndon, Nicolay and Hay.

ANDREW JOHNSON

was born at Raleigh, North Carolina, on December 29, 1808. Self-educated, he became a tailor in Greeneville, Tennessee, but soon went into politics where he rose steadily. From 1843 to 1853 he served in the House of Representatives, 1853-57 as governor of Tennessee and in 1857 was

elected Senator. Politically he was a Jacksonian Democrat, and his specialty was the fight for a more equitable land policy. Alone among the Southern Senators, he stood by the Union during the Civil War. In 1862 he became war governor of Tennessee and carried out a thankless and difficult job with great courage. Johnson became Lincoln's running mate in 1864 as a result of an attempt to give the ticket nonpartisan and nonsectional character. Succeeding to the presidency on Lincoln's death, Johnson sought to carry out his policy but without his political skill. The result was a hopeless conflict with the Radical Republicans who dominated Congress, passed measures over Johnson's vetoes and attempted to limit the power of the executive concerning appointments and removals. The conflict culminated with Johnson's impeachment for attempting to remove his disloyal Secretary of War in defiance of the Tenure of Office Act which required senatorial concurrence for such dismissals. The opposition failed by one vote to get the two-thirds necessary for conviction.

After his presidency, Johnson maintained an interest in politics and in 1875 was elected to the Senate. He died near Carter Station, Tennessee, on July 31, 1875. He married Eliza McCordie in 1827. An honest, courageous and intelligent man, Johnson lacked the tact, patience and self-control to be an effective President.

The standard biographies are by Winston Stryker and Milton.

ULYSSES SIMPSON GRANT

was born (as Hiram Ulysses Grant) at Point Pleasant, Ohio, on April 27, 1822. He finished West Point in 1843 and served without particular distinction in the Mexican War. In 1848 he married Julia Dent. He resigned from the army in 1854, following warnings from his commanding officer about his drinking habits, and for the next six years held a wide variety of jobs in the Middle West. With the outbreak of the Civil War, he sought a command and soon, to his surprise, was made a brigadier general. His continuing successes in the western theaters, culminating in the capture of Vicksburg in 1863, brought him national fame and soon the command of all the Union armies. His dogged, implacable policy of concentrating on dividing and destroying the Confederate armies brought the war to an end in 1865. In 1866 he was made full general.

Grant's relations with Johnson grew steadily worse; and in 1868, as the Republican candidate for President, Grant was elected with 214 electoral votes to 8 for the Democrat Horatio Seymour. From the start Grant showed his unfitness for the office. His cabinet was weak, his do-

mestic policy was confused, many of his intimate associates were corrupt. The notable achievement in foreign affairs was the settlement of controversies with Great Britain in the Treaty of London (1871), negotiated by his able Secretary of State, Hamilton Fish.

Nominated for a second term, he defeated Horace Greeley, the Democratic and Liberal Republican candidate, 286 votes to 63. The Panic of 1873 created difficulties for his second term.

After retiring from office, Grant toured Europe for two years and returned in time to accede to a third-term boom, but was beaten in the convention of 1880. Illness and bad business judgment darkened his last years, but he worked steadily at the *Personal Memoirs* which were to be so successful when published after his death at Mount McGregor, near Saratoga, New York, on July 23, 1885. Inarticulate, taciturn, loyal to his friends, he was an able general who should never have accepted the presidency. The standard biographies are by Hesselstine and Woodward.

RUTHERFORD BIRCHARD HAYES

was born at Delaware, Ohio, on October 4, 1822. A graduate of Kenyon College and the Harvard Law School, he practiced law in Sandusky and then in Cincinnati, Ohio. In 1852 he married Lucy Webb. A Whig, he joined the Republican party in 1855. During the Civil War he rose to the rank of major general. He served in Congress from 1865 to 1867 and then confirmed a reputation for honesty and efficiency in two terms as governor of Ohio. His re-election as governor in 1875 made him the logical candidate for those Republicans who wished to stop James G. Blaine in 1876, and he was successfully nominated.

The result of the election was for some time in doubt and hinged upon disputed returns from South Carolina, Louisiana, Florida and Oregon. Samuel J. Tilden, the Democratic candidate, had the larger popular vote but was adjudged by the strictly partisan decisions of the Electoral Commission to have one less electoral vote, 185 to 184. The national acceptance of this result was due in part to the general understanding that Hayes would pursue a conciliatory policy toward the South. He withdrew the troops from the South, took a conservative position on financial and labor issues and urged civil service reform.

Hayes served only one term by his own wish and spent the rest of his life in various humanitarian endeavors. He died in Fremont, Ohio, on January 17, 1893. A hard-working, conscientious, sensible man, Hayes represented the best type of Republican of his day. The standard biographies are by Eckenrode and Williams.

JAMES ABRAM GARFIELD,

the last President to be born in a log cabin, was born at Cuyahoga County, Ohio, on November 19, 1831. A Williams graduate, he taught school for a time and entered Republican politics in Ohio. In 1858 he married Lucretia Rudolph. During the Civil War he had a promising career, rising to the rank of major general of volunteers; but in 1863 he was elected to the House of Representatives where he served until 1880. His oratorical and parliamentary abilities soon made him the leading Republican in the House, though his record was marred by his unorthodox acceptance of a fee in the DeGolyer paving contract case and by suspicions of his complicity in the Crédit Mobilier scandal.

In 1880 Garfield was elected to the Senate, but instead became the presidential candidate on the 36th ballot as a result of a deadlock in the Republican convention. He gained 214 electoral votes to 155 for General Winfield Scott Hancock, the Democratic candidate. Garfield's administration was barely under way when he was shot by Charles J. Guiteau, a disappointed office seeker, in July. He died in Elberon, New Jersey, on September 19, 1881. An attractive and eloquent man, he was much beloved in his day.

The standard biographies are by Smith and Caldwell.

CHESTER ALAN ARTHUR

was born at Fairfield, Vermont, on October 5, 1830. A graduate of Union College, he became a successful New York lawyer. In 1859 he married Ellen Herndon. During the Civil War he held administrative jobs in the Republican state administration and in 1871 was appointed collector of the Port of New York by Grant. This post gave him control over considerable patronage; and, though not personally corrupt, Arthur managed his power in the interests of the New York machine so openly that President Hayes in 1877 called for an investigation, and in 1878 Arthur was suspended from his responsibilities.

In 1880 Arthur was nominated for Vice President in the hope of conciliating the followers of Grant and the powerful New York machine. As President on Garfield's assassination, Arthur, stepping out of his familiar role as spoilsman, backed civil service reform, reorganized the cabinet and prosecuted political associates accused of post office graft. Losing machine support and failing to gain the reformers, he was not renominated. He died in New York City on November 18, 1886. A tall, handsome, dignified man with real administrative abilities, he was a better President than his previous record promised. The standard biography is by Howe.

STEPHEN GROVER CLEVELAND

was born at Caldwell, New Jersey, on March 18, 1837. He was admitted to the bar in Buffalo, New York, in 1859 and lived there as a lawyer, with occasional incursions into Democratic politics, for more than twenty years. He did not participate in the Civil War. As mayor of Buffalo in 1881, he carried through a reform program so ably that the Democrats ran him successfully for governor in 1882. In 1884 he won the Democratic nomination for President. The campaign contrasted Cleveland's spotless public career with the uncertain record of James G. Blaine, the Republican candidate, and Cleveland received enough Mugwump (Independent Republican) support to win by 219 to 182 electoral votes.

As President, Cleveland pushed civil service reform, opposed the pension grab and attacked the high tariff rates. While in the White House he married Frances Folsom (1886). Renominated in 1888, Cleveland was defeated by Benjamin Harrison, polling more popular but fewer electoral votes. In 1892 he was re-elected over Harrison, 277 to 145, with 22 votes for James B. Weaver, the Populist candidate. When the Panic of 1893 burst upon the country, Cleveland's attempts to solve it by sound-money measures alienated the free-silver wing of the party, while his tariff policy alienated the protectionists. In 1894 he sent troops to break the Pullman strike. In foreign affairs his firmness caused Great Britain to back down in the Venezuela border dispute.

In his last years Cleveland was an active and much respected public figure. He died in Princeton, New Jersey, on June 24, 1908. An honest, stubborn, high-principled man, Cleveland was an old-fashioned liberal in the nineteenth-century sense who was baffled by the new problems of industrial society. The standard biographies are by Nevins and McElroy.

BENJAMIN HARRISON

was born in North Bend, Ohio, on August 20, 1833, the grandson of William Henry Harrison. A graduate of Miami University, he took up the law in Indiana and became active in Republican politics. In 1853 he married Caroline Lavinia Scott. During the Civil War he rose to the rank of brigadier general. A sound-money Republican, he was elected senator from Indiana in 1880 and in 1888 received the Republican nomination for President on the 8th ballot. Though behind on the popular vote, he won over Grover Cleveland in the electoral college by 233 to 168.

As President, Benjamin Harrison failed to please either the bosses or the reform element in the party. In foreign affairs he backed Secretary of State Blaine whose policy foreshadowed later American im-

perialism. In 1892 Harrison was renominated, but Cleveland beat him in the election. His wife died in the White House in 1892, and Harrison married her niece, Mary Scott (Lord) Dimmick, in 1896. After his presidency, he resumed law practice. He died in Indianapolis, Indiana, on March 13, 1901. Harrison was an honest man of very medium abilities.

WILLIAM MCKINLEY

was born in Niles, Ohio, on January 29, 1843. A graduate of Allegheny College, he rose from the ranks to become a major in the Civil War. Subsequently he opened a law office in Canton, Ohio, and in 1871 married Ida Saxton. Elected to Congress in 1876, he served there steadily till 1891, except for 1883-85. His faithful advocacy of business interests culminated in the passage of the highly protective McKinley Tariff of 1890. With the support of Mark Hanna, a shrewd Cleveland businessman interested in safeguarding tariff protection, McKinley became governor of Ohio in 1892 and Republican presidential candidate in 1896. The business community, alarmed by the progressivism of William Jennings Bryan, the Democratic candidate, spent considerable money to assure McKinley's victory which was by the margin of 271 to 176 in the electoral college.

The chief event of McKinley's administration was the war with Spain which resulted in our acquisition of the Philippines and other islands. With imperialism as an issue, McKinley defeated Bryan again in the election of 1900 by 292 to 155. On September 6, 1901, he was shot at Buffalo by Leon F. Czolgosz, an anarchist, and he died there on September 14. McKinley was a characteristic Republican politician dedicated to the service of the business community. The standard biography is by Olcott.

THEODORE ROOSEVELT

was born in New York City on October 27, 1858. A Harvard graduate, he was early interested in ranching, in politics and in writing picturesque historical narratives. He was a Republican member of the New York Assembly in 1882-84, an unsuccessful candidate for mayor of New York in 1886, a U. S. Civil Service Commissioner under Harrison, Police Commissioner of New York City in 1895 and Assistant Secretary of the Navy under McKinley in 1897. After exuding a belligerence which helped bring on the war with Spain, he resigned in 1898 to help organize a volunteer regiment named the Rough Riders and take a more direct part in the war. Always publicity-shrewd, he won the New York gubernatorial nomination in 1898 in spite of pronounced lack of enthusiasm on the part of the bosses.

After two years of T.R. in Albany, the New York bosses succeeded in getting him the vice-presidential nomination in 1900. Roosevelt accepted it with reluctance, feeling that his career had been ruined. As President on McKinley's assassination, he perceived the new popular mood of progressivism and initiated a policy of trust busting, designed to control giant corporations. He also strengthened government powers over interstate commerce and launched a conservation program to save natural resources. In foreign affairs he pursued a truculent policy, permitting the instigation of a revolt in Panamá to dispose of Colombian objections to the Panama Canal and helping to maintain the balance of power in the East by bringing the Russo-Japanese war to an end. In 1904 he decisively defeated Alton B. Parker, his conservative Democratic opponent, by an electoral margin of 336 to 140.

Following his second term he went big-game hunting in Africa and toured Europe. On his return to the United States, his increasing coldness toward Taft led him to overlook his earlier disclaimer of third-term ambitions and to re-enter politics. Defeated by the machine in the Republican convention of 1912, he organized the progressive party and polled more votes than Taft, though the split brought about the election of Wilson. From 1915 on, Roosevelt strongly favored intervention in the European war. He became deeply embittered at Wilson's refusal to allow him to raise a volunteer division. He died in Oyster Bay, New York, on January 6, 1919. He was married twice: in 1880 to Alice Hathaway Lee, who died in 1884; and in 1886 to Edith Kermit Carow.

The athletic advocate of the strenuous life, with his high voice, prominent teeth and thick glasses, Roosevelt captured the imagination of the American people. More sober judgment suggests that, so far as his progressivism was concerned, his bark was worse than his bite, but he was one of the great personalities of American history. The standard biography is by Pringle.

WILLIAM HOWARD TAFT

was born in Cincinnati, Ohio, on September 15, 1857. A Yale graduate, he entered Ohio Republican politics in the eighteen eighties. In 1886 he married Helen Herron. From 1887 to 1890, he served on the Ohio superior court; 1890-92, as solicitor general of the United States; 1892-1900, on the federal circuit court. In 1900 McKinley appointed him president of the Philippine Commission and in 1901 governor general. Taft had great success in pacifying the Filipinos, solving the problem of the church lands, improving economic conditions and establishing limited self-govern-

ment. His period as Secretary of War 1904-08 further demonstrated his capacity as administrator and conciliator; and he was Roosevelt's hand-picked successor in 1908. In the election he polled 321 electoral votes to 162 for William Jennings Bryan.

As President, though he carried on many of Roosevelt's policies, Taft got into increasing trouble with the progressive wing of the party and displayed mounting irritability and indecision. After his defeat in 1912, he became professor of constitutional law at Yale. In 1921 he was appointed Chief Justice of the United States. He died in Washington on March 8, 1930. Enormously large, deliberate and good-humored, Taft excelled as an administrator and judge, not as a political leader.

The standard biography is by Pringle.

THOMAS WOODROW WILSON

was born in Staunton, Virginia, on December 28, 1856. A Princeton graduate, he turned from law practice to post-graduate work in political science at Johns Hopkins University, receiving his Ph.D. in 1886. He taught at Bryn Mawr, Wesleyan and Princeton, and in 1902 was made president of Princeton. After an unsuccessful attempt to democratize the social life of Princeton, he welcomed an invitation in 1910 to be the Democratic gubernatorial candidate in New Jersey. His success in fighting the machine and putting through a reform program attracted national attention.

In 1912, after a protracted contest at Baltimore, Wilson won the Democratic nomination on the 46th ballot. In the election he received 435 electoral votes to 88 for Roosevelt and 8 for Taft. During his first term Wilson proceeded under the standard of the New Freedom to enact a program of domestic reform, including the Federal Reserve Act, the Clayton Anti-trust Act, the establishment of the Federal Trade Commission and other measures designed to restore competition in the face of the great monopolies. In foreign affairs, while privately sympathetic with the Allies, he strove to maintain strict neutrality in the European war and warned both sides against encroachments on American interests.

Re-elected in 1916 as a peace candidate, he tried to mediate between the warring nations; but, when the Germans resumed unrestricted submarine warfare in 1917, Wilson brought the United States into what he now believed was a war to make the world safe for democracy. He supplied the classic formulations of Allied war aims; and the armistice of November, 1918, was negotiated on the basis of Wilson's Fourteen Points. In 1919 he strove at Versailles to lay the foundations for enduring peace.

He accepted the imperfections of the Versailles Treaty in the expectation that they could be remedied by action within the League of Nations. He probably could have secured ratification of the treaty if he had adopted a more conciliatory attitude toward the mild reservationists; but his insistence on all or nothing eventually caused the diehard isolationists and diehard Wilsonites to unite in rejecting a compromise.

In September, 1919, Wilson suffered a paralytic stroke which limited his future activity. After the presidency he lived on in retirement in Washington, dying February 3, 1924. He was married twice—in 1885 to Ellen Louise Axson, who died in 1914, and in 1915 to Edith Bolling Galt. A man of high principle, inspiring eloquence and great intellectual ability, Wilson was the first leader to fire the imagination of the masses of the world with the vision of world peace. The standard biography is by Baker.

WARREN GAMALIEL HARDING

was born in Morrow County, Ohio, on November 2, 1865. After attending Ohio Central College, Harding became interested in journalism and in 1884 bought the *Marion (Ohio) Star*. In 1891 he married a wealthy widow, Florence Kling De Wolfe. As his paper prospered, he entered Republican politics, serving as state senator (1899-1903), and as lieutenant governor (1904-06). In 1910 he was defeated for governor but in 1914 was elected to the Senate. His reputation as orator made him keynoter in the 1916 convention.

When the 1920 Republican convention was deadlocked between Leonard Wood and Frank O. Lowden, Harding was made the dark-horse nominee on his solemn affirmation that there was no reason in his past that he should not be. Straddling the League question, Harding was elected easily, with 404 electoral votes to 127 for James M. Cox, his Democratic opponent. His cabinet contained some able men, but also some manifestly unfit for public office. Harding's own intimates were mediocre when they were not corrupt. The impending disclosure of scandals in the Interior and Justice departments and in the Veterans' Bureau, as well as political setbacks, profoundly worried him. On his return from Alaska in 1923, he died suddenly at San Francisco on August 2. A handsome and genial man, indiscriminating in his associates, lacking in political ideas or fortitude, Harding was totally unfitted for the presidency.

JOHN CALVIN COOLIDGE

was born in Plymouth, Vermont, on July 4, 1872. An Amherst graduate, he went into law practice at Northampton, Massa-

chusetts, in 1897. He married Grace Anna Goodhue in 1905. He entered Republican state politics, becoming successively mayor of Northampton, state senator, lieutenant governor and, in 1919, governor. His conduct in regard to the Boston police strike in 1919 won him a somewhat undeserved reputation for decisive action and brought him the Republican vice-presidential nomination in 1920. After Harding's death Coolidge handled the Washington scandals with care and finally managed to save the Republican party from public blame for the widespread corruption.

In 1924 Coolidge won re-election without difficulty, getting 382 electoral votes to 130 for the Democrat, John W. Davis, and 13 for Robert M. La Follette running on the Progressive ticket. His second term, like his first, was characterized by deference to big business, indifference to the underprivileged and a general satisfaction with the existing economic order. He stated that he did not choose to run in 1928, but he may have hoped to be drafted anyway.

After his presidency, Coolidge lived quietly in Northampton, writing an unilluminating *Autobiography* and conducting a syndicated column. He died in Northampton, Massachusetts, on January 5, 1933. His dry, Yankee humor, his frugality and glumness made him a paradoxically popular President in the boom period. The standard biographies are by White and Fuess.

HERBERT CLARK HOOVER

was born at West Branch, Iowa, on August 10, 1874. A Stanford graduate, he worked from 1895 to 1913 as a mining engineer and consultant in North America, Europe, Asia, Africa and Australia. In 1899 he married Lou Henry. During the First World War he served with distinction as chairman of the American Relief Committee in London, as chairman of the Commission for Relief in Belgium and as United States Food Administrator. His political affiliations were still sufficiently indeterminate for him to be mentioned as a possibility for both Republican and Democratic nominations in 1920; but after the election he served both Harding and Coolidge as Secretary of Commerce.

In the election of 1928 Hoover received 444 electoral votes to 87 for Alfred I. Smith, the Democratic candidate. He soon faced the worst depression in the nation's history; but his attacks upon it were hampered by his devotion to the theory that the forces which brought the crisis would soon bring the revival, and then by his belief that in too many areas the federal government had no power to act. In a succession of vetoes he struck down measures proposing a national employment system or national relief; he reduced in

ome tax rates; and only at the end of his term did he yield to popular pressure and let up agencies to make emergency loans (mostly to large business).

After his defeat in 1932, Hoover occupied himself with private business and with books and speeches attacking the New Deal. President Truman brought him back into official life by charging him in 1946 with various world food missions.

FRANKLIN DELANO ROOSEVELT

was born in Hyde Park, New York, on January 30, 1882. A Harvard graduate, he attended Columbia Law School and was admitted to the New York bar. In 1910 he was elected to the New York state senate as a Democrat. Re-elected in 1912, he was appointed Assistant Secretary of the Navy by Woodrow Wilson in 1913. In 1920 his radiant personality and his war services resulted in his nomination for Vice President as James M. Cox's running mate. After his defeat, he returned to law practice in New York. In August, 1921, Roosevelt was stricken with infantile paralysis while at Campobello, New Brunswick. After a long and gallant fight against the disease he recovered partial use of his legs. In 1924 and 1928 he led the fight at the Democratic national conventions for the nomination of Governor Alfred E. Smith of New York; and in 1928 Roosevelt was himself induced to run for governor of New York. He was elected and was re-elected in 1930.

In 1932 Roosevelt received the Democratic nomination for President and immediately launched a campaign which brought new spirit to a weary and discouraged nation. He won the election over Herbert Hoover by a margin of 472 to 59 in the electoral college. His first term was characterized by an unfolding of the New Deal program, with greater benefits for labor, the farmers and the unemployed, and the progressive estrangement of most of the business community.

At an early stage Roosevelt became aware of the menace to world peace involved in the existence of totalitarian fascism, and from 1937 on he tried to focus public attention on the trend of events in Europe and Asia. As a result he was widely denounced as a warmonger. He was re-elected in 1936 over Alfred M. Landon by the overwhelming electoral margin of 523 to 8; and the gathering international crisis caused him to decide to run again in 1940. He defeated Wendell L. Willkie, 449 to 82. Roosevelt's program to bring maximum aid to Britain and, after June, 1941, to Russia was bitterly opposed by a small but organized minority, until the Japanese attack on Pearl Harbor restored national unity. During the war Roosevelt shelved the New Deal in the interests of concili-

ating the business community, both in order to get full production during the war and to prepare the way for a united acceptance of the peace settlements after the war. A series of conferences with Winston Churchill and Joseph Stalin laid down the bases for the postwar world. In 1944 he was elected to a fourth term, running against Governor Thomas E. Dewey.

On April 12, 1945, Roosevelt died at Warm Springs, Georgia, shortly after his return from the Yalta Conference. His wife, Anna Eleanor Roosevelt, whom he married in 1905, is a woman of great ability who made significant contributions to her husband's policies. No President has been faced with so many staggering responsibilities, both at home and abroad, as Franklin Roosevelt. His success in bringing America safely through the greatest depression and the greatest war in world history was an accomplishment of the highest statesmanship; and his buoyant, fighting personality has left an indelible impression.

HARRY S. TRUMAN

was born on a farm near Lamar, Missouri, on May 8, 1884. During the First World War he served in France with the 129th Field Artillery. After engaging briefly and unsuccessfully in the haberdashery business in Kansas City, Truman entered local politics. Under the sponsorship of Thomas Pendergast, Democratic boss of Missouri, he held a number of local offices, preserving his personal honesty in the midst of a notoriously corrupt political machine. In 1934 he was elected to the Senate and was re-elected in 1940. During his first term he was a loyal but quiet supporter of the New Deal; but in the course of his second term, an appointment as head of a Senate committee to investigate war production brought out his special qualities of honesty, common sense and hard work, and he won widespread respect.

Nominated as Democratic candidate for Vice President in 1944, Truman became President on Roosevelt's death and immediately found himself confronted with complex postwar problems, both at home and abroad. His first efforts at solution were not markedly successful, and in 1946, the Republicans captured the Congress. The last two years of his first term, though handicapped by persistent congressional opposition, were distinguished by such proposals as the Marshall Plan and the Civil Rights program; and Truman's general record was held in the popular judgment to compare favorably with that of the Republican Congress. Following a campaign in which Truman revealed himself as a militant champion of New Deal principles, he won re-election over Governor Thomas E. Dewey, of New York, in a stunning political upset.

The 1948 Election

The election of President Harry S. Truman on Tuesday, Nov. 2, 1948, was one of the great political surprises of U. S. history. Not since 1916 had a presidential election been so close. Not until 11:14 A.M. on Wednesday did Governor Thomas E. Dewey concede his defeat; but as late as Thursday there was still a possibility that returns from California, Idaho and Indiana could take their electoral vote out of the Truman column into Dewey's. However, they remained for Truman, who won 304 electoral votes from 28 states. Dewey got 189 votes from 16 states. J. Strom Thurmond, candidate of the States' Rights Democratic party ("Dixiecrats"), got 28 votes from Alabama, Louisiana, Mississippi and South Carolina.

The Dixiecrat rebellion by conservative Southern Democrats, who objected to Truman's civil rights program, was one of the reasons he had been expected to lose. An-

other was the split-off of left-wing Democrats who formed the Progressive party with Henry Wallace as candidate. It received enthusiastic support from Communists. Wallace won no electoral votes but did draw away enough votes from Truman in New York State to cause Dewey to carry it.

Perhaps the main reason the nation was so surprised was that the Gallup, Roper and Crossley public opinion polls all indicated a substantial Dewey victory. Newspapers and radio political observers, the thinking perhaps colored by the polls, unanimously predicted the same.

The Republicans had controlled the 80th Congress, which Truman denounced as the worst, or at least second worst, Congress in history. In re-electing Truman the voters also wiped out Republican control of Congress, electing Democratic majorities in both Houses.

Wives of the Presidents of the United States

President	Wife's name	Year and place of birth	Married	Died	Sons
Washington	Mrs. Martha Dandridge Custis	1732, Va.	1759	1802	..
John Adams	Abigail Smith	1744, Mass.	1764	1818	3
Jefferson	Mrs. Martha Wayles Skelton	1748, Va.	1772	1782	1
Madison	Mrs. Dorothy "Dolly" Payne Todd	1772, N. C.	1794	1849	..
Monroe	Eliza Kortright	1768, N. Y.	1786	1830	..
J. Q. Adams	Louisa Catherine Johnson	1775, England	1797	1852	3
Jackson	Mrs. Rachel Donelson Robards	1767, Va.	1791	1828	..
Van Buren	Hannah Hoes	1783, N. Y.	1807	1819	4
W. H. Harrison	Anna Symmes	1775, N. J.	1795	1864	6
Tyler	Letitia Christian	1790, Va.	1813	1842	3
	Julia Gardiner	1820, N. Y.	1844	1889	5
Polk	Sarah Childress	1803, Tenn.	1824	1891	..
Taylor	Margaret Smith	1788, Md.	1810	1852	1
Fillmore	Abigail Powers	1798, N. Y.	1826	1853	1
	Mrs. Caroline McIntosh	1813, N. J.	1858	1881	..
Pierce	Jane Means Appleton	1806, N. H.	1834	1863	3
Buchanan	(Unmarried)	....	....	....	..
Lincoln	Mary Todd	1818, Ky.	1842	1882	4
Johnson	Eliza McCordle	1810, Tenn.	1827	1876	3
Grant	Julia Dent	1826, Mo.	1848	1902	3
Hayes	Lucy Ware Webb	1831, Ohio	1852	1889	7
Garfield	Lucretia Rudolph	1832, Ohio	1858	1918	4
Arthur	Ellen Lewis Herndon	1837, Va.	1859	1880	2
Cleveland	Frances Folsom	1864, N. Y.	1886	1947	2
B. Harrison	Caroline Lavinia Scott	1832, Ohio	1853	1892	1
	Mary Scott (Lord) Dimmick	1858, Pa.	1896	1948	..
McKinley	Ida Saxton	1847, Ohio	1871	1907	..
T. Roosevelt	Alice Hathaway Lee	1861, Mass.	1880	1884	..
	Edith Kermit Carow	1861, Conn.	1886	1948	4
Taft	Helen Herron	1861, Ohio	1886	1943	2
Wilson	Ellen Louise Axson	1860, Ga.	1885	1914	..
	Mrs. Edith Bolling Galt	1872, Va.	1915	....	..
Harding	Mrs. Florence Kling DeWolfe	1860, Ohio	1891	1924	..
Coolidge	Grace Anna Goodhue	1879, Vt.	1905	....	2
Hoover	Lou Henry	1875, Iowa	1899	1944	2
F. D. Roosevelt	Anna Eleanor Roosevelt	1884, N. Y.	1905	....	4
Truman	Bess Wallace	1885, Mo.	1919	....	..

U. S. National Conventions Since 1856

Date	Party	Where held	Nominated	Vote
June 17, 1856	R	Philadelphia	John C. Frémont	520
June 2, 1856	D	Cincinnati	James Buchanan	296
May 16, 1860	R	Chicago	Abraham Lincoln	364
April 23, 1860	D	Charleston & Baltimore	S. A. Douglas	181
June 7, 1864	R	Baltimore	Abraham Lincoln	Unanimous
Aug. 29, 1864	D	Chicago	Geo. B. McClellan	202½
May 20, 1868	R	Chicago	U. S. Grant	Unanimous
July 4, 1868	D	New York City	Horatio Seymour	Unanimous
June 5, 1872	R	Philadelphia	U. S. Grant	Unanimous
June 9, 1872	D	Baltimore	Horace Greeley	688
June 14, 1876	R	Cincinnati	R. B. Hayes	384
June 28, 1876	D	St. Louis	S. J. Tilden	508
June 2, 1880	R	Chicago	J. A. Garfield	399
June 23, 1880	D	Cincinnati	W. S. Hancock	705
June 3, 1884	R	Chicago	J. G. Blaine	541
July 11, 1884	D	Chicago	Grover Cleveland	683
June 19, 1888	R	Chicago	Benjamin Harrison	544
June 6, 1888	D	St. Louis	Grover Cleveland	By acclamation
June 7, 1892	R	Minneapolis	Benjamin Harrison	535⅔
June 21, 1892	D	Chicago	Grover Cleveland	617½
June 16, 1896	R	St. Louis	William McKinley	661½
July 7, 1896	D	Chicago	William J. Bryan	500
June 19, 1900	R	Philadelphia	William McKinley	Unanimous
July 4, 1900	D	Kansas City	William J. Bryan	By acclamation
June 21, 1904	R	Chicago	Theodore Roosevelt	Unanimous
July 6, 1904	D	St. Louis	Alton B. Parker	678
June 16, 1908	R	Chicago	William H. Taft	702
July 7, 1908	D	Denver	William J. Bryan	892½
June 18, 1912	R	Chicago	William H. Taft	561
June 25, 1912	D	Baltimore	Woodrow Wilson	990
June 7, 1916	R	Chicago	Charles E. Hughes	949½
June 14, 1916	D	St. Louis	Woodrow Wilson	By acclamation
June 8, 1920	R	Chicago	Warren G. Harding	692⅔
June 28, 1920	D	San Francisco	James M. Cox	732½
June 10, 1924	R	Cleveland	Calvin Coolidge	1,065
June 24, 1924*	D	New York City	John W. Davis	839†
June 12, 1928	R	Kansas City	Herbert Hoover	837
June 26, 1928	D	Houston	Alfred E. Smith	849½
June 14, 1932	R	Chicago	Herbert Hoover	1,126½
June 27, 1932	D	Chicago	F. D. Roosevelt	945
June 9, 1936	R	Cleveland	Alfred M. Landon	984
June 23, 1936	D	Philadelphia	F. D. Roosevelt	By acclamation
June 24, 1940	R	Philadelphia	Wendell L. Willkie	Unanimous
July 15, 1940	D	Chicago	F. D. Roosevelt	Unanimous
June 26, 1944	R	Chicago	Thomas E. Dewey	1,056
July 19, 1944	D	Chicago	F. D. Roosevelt	1,086-90
June 21, 1948	R	Philadelphia	Thomas E. Dewey	1094-0
July 12, 1948	D	Philadelphia	Harry S. Truman	947½-263½
July 17, 1948 (†)	Birmingham		J. Strom Thurmond	By acclamation
July 22, 1948	P	Philadelphia	Henry A. Wallace	By acclamation

*In session until July 10, 1924. †Nominated on 103d ballot. ‡"States' rights" delegates from 13 Southern states.

Earlier Conventions

For most of the elections before 1832, presidential candidates were nominated by Congressional caucus. The first national nominating convention in American history was held by the Antimasonic party on Sept. 8, 1831, in Baltimore. On Dec. 12 of the same year, the National Republican party which was to become the Whig party about 1834 held a national convention in Baltimore and nominated Clay and Sergeant. On May 21, 1832, the Democratic party held a national convention in Baltimore to nomi-

nate a candidate for Vice President to run with Jackson. Van Buren was the nominee.

Up to the disappearance of the Whig party after its bad defeat in 1852, Whig conventions were held in Harrisburg, Pa., in 1839, in Baltimore in 1844 and 1852, and in Philadelphia in 1848; none was held in 1836; instead regional meetings placed three anti-Jacksonian candidates on the ballot.

Other Democratic conventions were held in Baltimore in 1835, 1840, 1844, 1848 and 1852.

Qualifications for Voting in the 48 States

Source: Questionnaires to the States.

State	Min. length of U. S. citizenship	State	Residence ¹ county	District	Date literacy test adopted	Poll tax ²
Alabama.....	.....	2 yr.	1 yr.	3 mo.	1946	yes
Arizona.....	.....	1 yr.	1 mo.	1 mo.	1912	.....
Arkansas.....	5 yr.	1 yr.	6 mo.	1 mo.	.....	yes
California.....	1 yr.	1 yr.	3 mo.	40 da.	.....	.....
Colorado.....	1 yr.	1 yr.	3 mo.	15 da.	.....	.....
Connecticut.....	.....	1 yr.	.....	6 mo. ³	1855	.....
Delaware.....	1 yr.	1 yr.	3 mo.	1 mo.	1897	.....
Florida.....	.....	1 yr.	6 mo.	.....	.....	.....
Georgia ⁴.....	.....	1 yr.	6 mo.	.....	1877	.....
Idaho.....	.....	6 mo.	1 mo.	.....	.....	.....
Illinois.....	.....	1 yr.	3 mo.	1 mo.	.....	.....
Indiana.....	.....	6 mo.	2 mo. ⁵	1 mo.	.....	.....
Iowa.....	.....	6 mo.	2 mo.	10 da.	.....	.....
Kansas.....	.....	6 mo.	1 mo.	1 mo.	.....	.....
Kentucky.....	.....	1 yr.	6 mo.	2 mo.	.....	.....
Louisiana.....	.....	2 yr.	1 yr. ⁶	3 mo. ⁷	.....	.....
Maine.....	.....	6 mo.	.....	3 mo.	1892	.....
Maryland.....	.....	1 yr.	6 mo.	6 mo.	.....	.....
Massachusetts.....	.....	1 yr.	.....	6 mo. ⁸	.....	.....
Michigan.....	.....	6 mo.	.....	20 da. ³	.....	.....
Minnesota.....	3 mo.	6 mo.	.....	1 mo.	.....	.....
Mississippi.....	.....	2 yr.	.....	1 yr.	.....	yes
Missouri.....	.....	1 yr.	2 mo.	2 mo.	.....	.....
Montana.....	.....	1 yr.	1 mo.	1 mo. ⁸	.....	.....
Nebraska.....	.....	6 mo.	40 da.	10 da.	.....	.....
Nevada.....	.....	6 mo.	1 mo.	10 da. ⁹	.....	.....
New Hampshire.....	6 mo.	6 mo.	6 mo.	6 mo.	1905	yes
New Jersey.....	.....	1 yr.	5 mo.	.....	.....	.....
New Mexico.....	.....	1 yr.	2 mo.	1 mo.	.....	.....
New York.....	3 mo.	1 yr.	4 mo.	1 mo.	1921	.....
North Carolina.....	1 yr.	1 yr.	.....	4 mo.	1901	.....
North Dakota.....	.....	1 yr.	3 mo.	1 mo.	.....	.....
Ohio.....	.....	1 yr.	40 da.	40 da. ⁹	.....	.....
Oklahoma.....	.....	1 yr.	6 mo.	1 mo. ⁸	.....	.....
Oregon.....	.....	6 mo.	.....	1 mo.	1924	.....
Pennsylvania.....	1 mo.	1 yr.	.....	2 mo.	.....	.....
Rhode Island.....	.....	2 yr.	.....	6 mo. ³	.....	.....
South Carolina.....	.....	2 yr.	1 yr.	4 mo.	1895	yes
South Dakota.....	5 yr.	1 yr.	3 mo.	1 mo. ⁸	.....	.....
Tennessee.....	.....	1 yr.	6 mo.	21 da.	.....	yes
Texas.....	.....	1 yr.	6 mo.	.....	.....	yes
Utah.....	3 mo.	1 yr.	4 mo.	2 mo.	.....	.....
Vermont.....	.....	1 yr.	.....	3 mo. ⁹	.....	.....
Virginia.....	1 yr.	1 yr.	6 mo.	1 mo.	1902	yes
Washington.....	.....	1 yr.	3 mo.	1 mo.	.....	.....
West Virginia.....	.....	1 yr.	2 mo.	.....	.....	.....
Wisconsin.....	.....	1 yr.	.....	10 da.	.....	.....
Wyoming.....	.....	1 yr.	1 mo.	10 da.	1889	.....

¹Registration of all or part of the voters is required in most states. No registration is required in Arkansas, North Dakota and Texas. In Connecticut, registration is permanent. In Vermont, name must be on check-list.

²Although poll or head taxes are levied in several other states, those listed make payment of the tax a condition for voting. ³City or town. ⁴Minimum voting age is 18; in all other states, minimum age is 21. ⁵Township. ⁶Parish. ⁷Ward. ⁸Precinct. ⁹To vote for representatives to General Assembly.

Plurality and Majority

In order to win a plurality in an election, a candidate must receive a greater number of votes than any candidate running against him. If he receives 50 votes, for example, and two other candidates receive 49 and 2, he will have a plurality of one vote over his closest opponent.

However, a candidate does not have a majority unless he receives more than 50 percent of the total votes cast. In the example above, the candidate does not have a

majority, because his 50 votes are less than 50 percent of the 101 votes cast.

If only two candidates receive votes, plurality is necessarily a majority, but more than two candidates receive votes, it is possible for one to have a substantial plurality without a majority.

As a candidate for President of the U. S. must have a majority in the electoral college, which at present casts 531 votes, must receive 266 votes or more to be elected.

THE FORTY-EIGHT STATES AND THE TERRITORIES

The following symbols are used in the text: *denotes unofficial; chief cities are listed in order of population size with the capital city designated by CAPITAL LETTERS; leaders (...) preceding the capital city denote that other titles of larger size have not been mentioned; the Governor's name is followed by his party affiliation and the date of termination of office; area includes total of land and water.

ALABAMA

Entered Union & (rank): Dec. 14, 1819 (22)

Succeeded from Union: Jan. 11, 1861

Re-entered Union: June 25, 1868

Motto: *Audemus Jura Nostra Defendere* (We dare defend our rights)

Flower: Goldenrod

Bird: Yellowhammer

Song: "Alabama"

Nickname: Cotton

Origin of name: from a Muskogean Indian tribe of the same name

1940 population & (rank): 2,832,961 (17)

1948 est. pop. & (rank): 2,848,000 (18)

Area, sq. mi. & (rank): 51,609 (28)

Governor: James E. Folsom (Dem., 1951)

Chief products: cotton, iron, steel

Chief cities: Birmingham, Mobile, MONTGOMERY

Alabama is the biggest heavy-industry state in the South. Cotton goods, iron and steel and saw mill products lead Alabama's manufacturing, which is centered in the hills, mines and factories in and around Birmingham, the "Pittsburgh of the South." The state is also high in the growing of oats, corn, hay and sweet potatoes. Other interests include the making of commercial fertilizer and shipping of raw cotton, iron and steel and hardwood lumber.

Muscle Shoals, on the Tennessee River, provides a great electric power source. At Tuskegee Institute, founded by Booker T. Washington, Dr. George Washington Carver carried out his famed agricultural research. Alabama is the only state that compels all adults from 14 to 50 to undergo examination for syphilis.

The Confederacy was founded at Montgomery in Feb., 1861, and for a time the city was the Confederate capital.

Hernando de Soto and his treasure seekers first saw the state in 1540 although Cabeza de Vaca may have preceded him in 528.

ARIZONA

Entered Union & (rank): Feb. 14, 1912 (48)

Motto: *Dilat Deus* (God enriches)

Flower: Saguaro Cactus

Bird: Cactus Wren

Song: "Arizona"

Nickname: Baby; Grand Canyon

Origin of name: from the Spanish meaning "dry area"

1940 population & (rank): 499,261 (43)

1948 est. pop. & (rank): 664,000 (37)

Area, sq. mi. & (rank): 113,909 (5)

Governor: Dan E. Garvey (Dem., 1951)

Chief products: copper, cotton, livestock

Chief cities: PHOENIX, Tucson, Douglas

Mining, particularly of copper, gold, vanadium and silver, leads the industries of

Arizona, and the smelting and refining of copper are the state's principal activities.

Irrigation is vital to its agriculture, and its once arid and useless land now produces cotton, corn, wheat, sorghums, citrus fruit and vegetables.

Phoenix, its largest city, is both a popular health resort and a busy shipper of cotton and vegetables. Douglas loads cattle and smelts copper.

With the Hopi, Navajo (the largest in numbers) and Apache tribes, Arizona has the second largest U. S. Indian population spread over fourteen reservations. It also has some of the country's most famous scenery. In the north is the Grand Canyon; in the east is the Petrified Forest, covering an area of 85,303.63 acres.

Marcos de Niza, a Franciscan friar, first entered the state in 1539 in search of the mythical seven cities of Cibola, and was followed a year later by Coronado.

ARKANSAS

Entered Union & (rank): June 15, 1836 (25)

Succeeded from Union: May 6, 1861

Re-entered Union: June 22, 1868

Motto: *Regnat Populus* (The people rule)

Flower: Apple Blossom

Bird: Mockingbird

Song: "Arkansas"

Nickname: Wonder

Origin of name: from the Quapaw Indians

1940 population & (rank): 1,949,387 (24)

1948 est. pop. & (rank): 1,925,000 (30)

Area, sq. mi. & (rank): 53,102 (26)

Governor: Sidney S. McMath (Dem., 1951)

Chief products: cotton, bauxite

Chief cities: LITTLE ROCK, Fort Smith, Hot Springs, Pine Bluff

About 90 percent of the nation's bauxite—the source of aluminum—comes from the earth of Arkansas, which also contains North America's only known diamond mine, located in Pike County near Murfreesboro, and presently inactive.

Mostly flat, Arkansas has an equable southern climate and fertile central valleys which grow cotton, rice, wheat, corn, oats, potatoes and fruit. Other industries are oil production, lumbering and the production of whetstones and antimony ore.

Hot Springs entertains fifteen times its population in guests each year. Its forty-seven famous curative mineral springs, the only ones administered by the Federal Government, are in Hot Springs National Park in the Ouachita Mountains. Pine Bluff has the unique distinction of having the largest archery factory in the country.

Hernando de Soto was probably the first white man to see this state when he explored the area in 1541. The first settlers were French, who, in 1686, started a frontier trading post.

CALIFORNIA

Entered Union & (rank): Sept. 9, 1850 (31)
Motto: *Eureka* (I have found it)
Flower: Golden Poppy
Bird: Calif. Valley Quail
Song: "I Love You, California"
Nickname: Golden
Origin of name: from a book by the Spaniard Ordoñez de Montalvo
1940 population & (rank): 6,907,387 (5)
1948 est. pop. & (rank): 10,031,000 (3)
Area, sq. mi. & (rank): 158,693 (2)
Governor: Earl Warren (Rep., 1951)
Chief products: oil, fruit, airplanes, shipping, minerals
Chief cities: Los Angeles, San Francisco, Oakland, San Diego, Long Beach, SACRAMENTO

California, celebrated for cinema and sunshine, is one of the nation's economic giants. It collects more money from raising food and catching fish than any other state and it stands high in oil production, lumbering and manufacturing. Out-of-state tourist visitors and the travel and recreation expenditures of the state's residents continue to play an important part in the expansion of trade and employment opportunities. Irrigation, in which California leads the country, makes possible the big crop harvest of corn, wheat, sugar beets, walnuts, almonds and almost every other kind of fruits and vegetables. The state also leads in making wines and brandies and growing grapes.

Nature is spectacular. Death Valley, in the southeast, is 275 feet below sea level, the lowest spot in the nation; Mt. Whitney, a 14,495-foot peak, is the highest point in the U. S.; Lassen Peak is the only active U. S. volcano although its last eruptions were recorded in the years from 1914 to 1917; and the General Sherman Tree in Sequoia National Park is estimated to be about 3,500 years old. San Pedro is the world's largest man-made harbor, and the Bank of America National Trust and Savings Association, operated and owned by Amadeo P. Giannini, is the world's largest private bank.

Gold, which was responsible for the state's settlement boom, is still found here, but the state's most important mineral products today are oil, natural gas, sand and gravel, lead, tin and cement.

California is a leader in industrial energy and its cities specialize in airplane making, shipbuilding, furniture manufacturing and machinery production.

California's four national parks are great tourist attractions and the San Francisco-Oakland and Golden Gate Bridges are among the world's engineering marvels.

Because written Chinese contains no alphabet, the telephone operators in Chinatown of San Francisco are unique in that they have to memorize the names, addresses and telephone numbers of all subscribers.

Juan Rodríguez Cabrillo, Spanish explorer, was probably the first white man to see the state in 1542.

COLORADO

Entered Union & (rank): Aug. 1, 1876 (38)
Motto: *Nil Sine Numine* (Nothing without the Deity)
Flower: Columbine
Bird: Lark Bunting
Song: "Where the Columbines Grow"
Nickname: Centennial
Origin of name: from the Spanish meaning "red"
1940 population & (rank): 1,123,296 (33)
1948 est. pop. & (rank): 1,165,000 (34)
Area, sq. mi. & (rank): 104,247 (7)
Governor: Lee Knous (Dem., 1951)
Chief products: sugar beets, minerals
Chief cities: DENVER, Pueblo, Colorado Springs

Colorado, the most elevated state in the nation, with fifty-four of its peaks towering over 14,000 feet in height and at least 1,144 going beyond the 10,000-foot mark, began as a miner of gold but has been predominantly agricultural in recent times. Wheat, hay, beans, sugar beets, corn, potatoes, barley and truck vegetables head the crop list. Like California and Arkansas, the state has a highly developed irrigation system to counteract its dry climate and promote its agriculture.

Gold, silver, vanadium and molybdenum are still mined.

Pueblo, the "Pittsburgh of the West," makes iron, steel, brick, tile and foundry products. Colorado Springs is perhaps the most popular tourist center in the Rocky Mountain sector. Mount Evans Highway is the highest auto road in the world. The world's highest suspension bridge stretches 1,053 feet over the Royal Gorge of the Arkansas River. Summit Lake, 12,740 feet high, near the top of Mt. Evans, the highest lake in the U. S., also is in Colorado.

Of archeological interest are the cliffs and canyons of the southwestern part of the state dating back at least 1000 years.

Coronado entered the state in 1540.

CONNECTICUT

Entered Union & (rank): Jan. 9, 1788 (5)
Motto: *Qui Transtulit Sustinet* (He who transplanted continues to sustain)
Flower: Mountain Laurel
Bird: Ruby-crowned Kinglet or Robin
Song: "Connecticut State Song"
Nickname: Nutmeg; Constitution
Origin of name: from an Indian word meaning "long river"
1940 population & (rank): 1,709,242 (31)
1948 est. pop. & (rank): 2,011,000 (27)
Area, sq. mi. & (rank): 5,009 (46)
Governor: Chester Bowles (Dem., 1951)
Chief products: mfd. goods, machinery
Chief cities: HARTFORD, New Haven, Bridgeport

Connecticut earned its sobriquet, the "Arsenal of the Nation," by its ability to turn out firearms and ammunition in early days, and from this developed an ability to turn out precision instruments of all classes.

Connecticut's cities produce a variety of products, some of which are: arms, sewing machines, airplanes, typewriters, motors, hardware, cutlery, tools, clocks, locks, pottery, machinery, brass products and hats. Hartford, which has the oldest U. S. newspaper, the *Courant*, established in 1764, is the insurance capital of the nation.

Connecticut devotes its farmland mainly to dairying, fruit growing and poultry raising. It stands high in tobacco growing and is a crop in the nation receives as high a price per acre as does her shade-grown tobacco.

The state is a popular resort area both on its beaches on Long Island Sound and on its inland lakes and forested hills. The southwest part of the state is a suburban area of New York City.

Connecticut was the first state to have a written constitution, the *Fundamental Orders*, adopted by three original towns of Colonial days in Jan., 1639.

A Dutch trader, Adrian Block, from Manhattan, began the exploration and settlement of the state in 1614.

DELAWARE

Entered Union & (rank): Dec. 7, 1787 (1)
Motto: Liberty and Independence
Flower: Peach Blossom*
Bird: Blue Hen or Cardinal*
Song: "Our Delaware"

Nickname: Diamond; Blue Hen
Origin of name: in honor of Lord De La Warr

1940 population & (rank): 266,505 (46)
1948 est. pop. & (rank): 297,000 (46)
Area, sq. mi. & (rank): 2,057 (47)
Governor: Elbert N. Carvel (Dem., 1953)
Chief products: chemicals, poultry

Chief cities: Wilmington, DOVER, Newark
Little Delaware, at the lowest mean elevation of any state, grows a great variety of small fruit and vegetables and is a U. S. pioneer in the industry of food canning. Apples, strawberries, apples, corn, wheat, and truck vegetables are the leading crops. Fishing in the bay is an important industry. Delaware's chicken farms are one of the great supply sources for the big markets of the East.

Wilmington, containing almost half of the state's population, is the home of the E. I.

Pont de Nemours & Co., which produces mostly explosives in this state, and is one of the many corporations that take advantage of Delaware's low corporate tax rates.

Under a law of 1771, Delaware still maintains the whipping post as punishment for more crimes but the institution is mostly maintained as a historical oddity.

The first U. S. iron steamship was built in this state in 1836. Delaware was the first state to ratify the Constitution, on December 7, 1787. During the Civil War, the southern part of the state supplied many porters to the Confederate cause.

Peter Heyes, a Dutch trader, was the first to enter Delaware Bay in his exploration of the bay.

DISTRICT OF COLUMBIA

1940 population: 663,091
1948 est. pop.: 898,000
Area, sq. mi.: 69

The District of Columbia—identical with the City of Washington—is the capital of the U. S. and the first carefully planned capital in the world.

D. C. history began in 1790 when Congress directed selection of a new capital site, 10 miles square, along the Potomac. When the site was determined, it included thirty and three-quarters square miles on the Virginia side of the river. In 1846, however, Congress returned that area to Virginia.

President Washington had commissioned Major Pierre L'Enfant, a French engineer who had fought in the Revolution, to plan the new capital and in 1800 the government moved in. In 1814, during the War of 1812, a British force fired the capital and it was from the white paint applied to cover fire damage that the President's home came to be called the White House.

Washington's skyline is dominated by the Capitol and the Washington Monument, towering 555 feet. The Capitol, while not in the city center, is the key to the street address system. The city is laid out in rectangular blocks, created by streets intersecting at right angles. In addition, diagonal arteries fan out from various centers. Pennsylvania Avenue—the radial lines are generally named for the states—is the most famous of them, with the White House at number 1600.

Washington has many world-famous buildings and monuments—the Library of Congress, Jefferson Memorial, Lincoln Memorial, Grant Memorial, Tomb of the Unknown Soldier, Treasury Building, the Pentagon, Petersen House (where Lincoln died) and scores of others.

Washington is administered by three commissioners appointed by the President. Two of them must be residents of D. C. and the third must be a U. S. Army engineer appointed by the Chief of Engineers.

FLORIDA

Entered Union & (rank): Mar. 3, 1845 (27)
Seceded from Union: Jan. 10, 1861
Re-entered Union: June 25, 1868

Motto: In God We Trust
Flower: Orange Blossom
Bird: Mockingbird
Song: "Swanee River"

Nickname: Peninsula
Origin of name: from the Spanish meaning "feast of flowers"

1940 population & (rank): 1,897,414 (27)
1948 est. pop. & (rank): 2,356,000 (24)
Area, sq. mi. & (rank): 58,560 (21)

Governor: Fuller Warren (Dem., 1953)
Chief products: fruit, cattle
Chief cities: Jacksonville, Miami, Tampa,
... TALLAHASSEE

Agriculture is Florida's biggest steady pursuit, but hotel statistics point to its chief fame—the resort and tourist business.

Along its 3,751-mile (including the islands) tidal coastline, the longest of any state, dozens of communities more than double in population during the winter season when northerners flee snow and cold.

Oranges and grapefruit lead Florida's crop list, then come tomatoes, peanuts, corn, celery and potatoes. Truck gardening and commercial fishing are leading industries. Deep-sea fishing for sport is a leading tourist hobby.

Florida's low elevation is dotted by some 30,000 small lakes and the Everglades swamp in the south. Tampa is one of the largest cigar manufacturers and Jacksonville ships lumber and turpentine. St. Augustine, founded in 1565, is the oldest town of European origin in the U. S. Key West, exclusive resort city, is the southernmost city in the U. S. and is connected to the mainland by a unique causeway.

Ponce de León, seeking the mythical "Fountain of Youth," first saw the state in 1513.

GEORGIA

Entered Union & (rank): Jan. 2, 1788 (4)

Seceded from Union: Jan. 19, 1861

Re-entered Union: July 15, 1870

Motto: Wisdom, Justice, Moderation

Flower: Cherokee Rose

Bird: Brown Thrasher*

Song: "Georgia"

Nickname: Cracker

Origin of name: in honor of King George II of England

1940 population & (rank): 3,123,723 (14)

1948 est. pop. & (rank): 3,128,000 (15)

Area, sq. mi. & (rank): 58,876 (20)

Governor: Herman Talmadge (Dem., 1951)

Chief products: cotton, peanuts, lumber

Chief cities: ATLANTA, Savannah, Augusta

Georgia is typical of the changing South. The value of its factory products has passed the value of its farm products, and industrialization is ever increasing. Atlanta is achieving importance as an automobile maker. Cotton and lumber products, fertilizer, processed food and a great variety of other items are among the factory output of Macon, Augusta and Savannah.

Georgia ranks high in cotton, tobacco, peanuts and pecans. Georgia's peaches are nationally famous. From its vast stands of pine come more than half of all U. S. resin and turpentine. The state is one of the leaders in the value of its clay products. Cattle grazing is extensive. Georgia marble is widely exported.

Warm Springs has the celebrated foundation operated to aid infantile paralysis victims. It was there that President Franklin D. Roosevelt died of a cerebral hemorrhage on April 12, 1945.

Hernando de Soto, a Spaniard, in 1540, first looked over the red clay of Georgia and General James Oglethorpe founded its first British colony on Feb. 12, 1733 as a haven for debtors and seekers of religious freedom.

IDAHO

Entered Union & (rank): July 3, 1890 (4)
Motto: *Esto Perpetua* (May thou endure forever)

Flower: Syringa

Bird: Mountain Bluebird

Song: "Here We Have Idaho"

Nickname: Gem

Origin of name: from a Shoshoni Indian word meaning "sunup"

1940 population & (rank): 524,873 (42)

1948 est. pop. & (rank): 530,000 (43)

Area, sq. mi. & (rank): 83,557 (12)

Governor: C. A. Robins (Rep., 1951)

Chief products: potatoes, minerals, livestock

Chief cities: BOISE, Pocatello, Idaho Falls

Idaho's huge investment in irrigation has advanced its agriculture well ahead of mining. Idaho potatoes are eaten everywhere. The state grows apples and other fruits and wheat, corn and barley. The state is light diversified manufacturing and Pocatello has a cheese factory with a world market.

Idaho mines gold, silver, lead, zinc, copper and tungsten, and still has vast undeveloped mineral wealth. In its rugged central mountains is an area that is reachable only by pack horse. The forests of the state, covering at least one-third of the area, account for the fact that lumbering is an extensive industry.

Tourist trade is important. Hunting and fishing are excellent. Sun Valley is a famous resort and attracts countless tourists to swimming and skiing facilities, both to be enjoyed at the same time and season on different levels of the mountain.

Lewis and Clark visited Idaho in 1805 and the first settlement began with the gold strike of 1860.

ILLINOIS

Entered Union & (rank): Dec. 3, 1818 (4)

Motto: State Sovereignty—National Union

Flower: Violet

Bird: Cardinal

Song: "Illinois"

Nickname: Sucker; Prairie

Origin of name: from an Indian word and French suffix meaning "tribe of supermen"

1940 population & (rank): 7,897,241 (3)

1948 est. pop. & (rank): 8,670,000 (4)

Area, sq. mi. & (rank): 56,400 (23)

Governor: Adlai E. Stevenson (Dem., 1951)

Chief products: mfd. goods, railways, coal, meat packing

Chief cities: Chicago, Peoria, ... SPRINGFIELD

Illinois anchors the Midwest like a giant, versatile in every big wealth-making industry. It stands high in manufacturing, coal mining, farm cash income, oil production. The sprawling Chicago district (including a slice of Indiana) is a great iron and steel producer, meat packer, grain change and rail center. Chicago is also a busy long-flight airport city and Great Lakes port area.

As a farmer, Illinois stands first in soy beans and high in corn, oats, wheat, barley, potatoes and truck vegetables. Hog raising and dairying are important industries. The Illinois sand and gravel business exceeded only by California.

Illinois manufactures almost everything. Railroad cars, clothing, furniture, tractors, tractors, watches and farm implements are some of the items made in its several cities. The biggest government arsenal in the world is located on a Mississippi island off Rock Island. Springfield contains Oak Ridge Cemetery where the body of Abraham Lincoln rests.

The year 1858 is marked in Illinois history as the date of the great debating contest between Lincoln and Stephen A. Douglas for the United States Senatorship. Lincoln lost the campaign but his anti-slavery speeches won for him the presidential nomination in the subsequent presidential election.

Marquette and Joliet, in 1673, were the first known explorers of this state.

INDIANA

Entered Union & (rank): Dec. 11, 1816 (19)

Motto: The Crossroads of America

Flower: Zinnia

Bird: Cardinal

Song: "On the Banks of the Wabash Far Away"

Nickname: Hoosier

Origin of name: meaning "land of Indians"

1940 population & (rank): 3,427,796 (12)

1948 est. pop. & (rank): 3,909,000 (11)

Area, sq. mi. & (rank): 36,291 (37)

Governor: Henry F. Schricker (Dem., 1953)

Chief products: iron and steel, mfd. goods, corn

Chief cities: INDIANAPOLIS, Fort Wayne, Gary

Indiana's fifty-one-mile Michigan water-front is one of the great industrial centers in the world, turning out iron and steel and other products to make this state a leader in manufacturing. Its cities have some of the world's largest industrial plants and their output is further swelled by the mills and factories. The list of products is endless—automobiles, farm implements, aviation and railroad equipment, sewing machines are made from iron ore mined in the Great Lakes region.

As a farmer the state stands high in soy beans, corn, tobacco, onions, wheat, oats, and tomatoes. The state produces most of the U. S. peppermint and spearmint oil.

Indianapolis is the largest U. S. city not on a navigable body of water. Wyandotte Lake, the second largest in the U. S., is located in Crawford County of Southern Indiana. West Baden and French Lick are well known for their mineral springs. Indiana was one of the early states to adopt the secret ballot based on the Australian system.

La Salle probably was the first white man to pass through the state in 1671.

IOWA

Entered Union & (rank): Dec. 28, 1846 (29)

Motto: Our Liberties We Prize and Our Rights We Will Maintain

Flower: Wild Rose

Bird: Eastern Goldfinch

Song: "Iowa"

Nickname: Hawkeye

Origin of name: probably from an Indian word meaning "this is the place"

1940 population & (rank): 2,538,268 (20)

1948 est. pop. & (rank): 2,625,000 (20)

Area, sq. mi. & (rank): 56,280 (24)

Governor: William S. Beardsley (Rep., 1951)

Chief products: corn, hogs

Chief cities: DES MOINES, Sioux City, Davenport

Iowa stands in a class by itself as a producer of corn and hogs. The state's productivity often brings it the largest agricultural income in the nation. Ninety percent of the state is under the plow and the fertility of its soil is unsurpassed anywhere. It also grows oats, soy beans, hemp, hay, popcorn, fruit, nuts and vegetables in great quantities.

Its top industrial activity is naturally centered in meat packing. Des Moines fittingly leads all cities in the publication of farm journals and is also a large insurance center. Muscatine is the largest U. S. maker of pearl buttons. Other Iowa factory products are farm implements, washing machines, fountain pens and railroad and auto equipment.

Iowa has always had a low illiteracy rate and in many years has had the lowest in the nation. The first President to be born west of the Mississippi was Herbert C. Hoover, who came from West Branch.

Marquette and Joliet first explored the state in 1673 and it was about 1875 that Julien Dubuque established the first white settlement on the site of the city that was later named in his honor.

KANSAS

Entered Union & (rank): Jan. 29, 1861 (34)

Motto: *Ad Astra Per Aspera* (To the stars through difficulties)

Flower: Sunflower

Bird: Western Meadow Lark

Song: "Home on the Range"

Nickname: Sunflower; Jayhawker

Origin of name: from a Sioux word meaning "people of the south wind"

1940 population & (rank): 1,801,028 (29)

1948 est. pop. & (rank): 1,968,000 (29)

Area, sq. mi. & (rank): 82,276 (13)

Governor: Frank Carlson (Rep., 1951)

Chief products: wheat, corn, cattle

Chief cities: Kansas City, Wichita, TOPEKA

Kansas finds its strength in wheat growing and flour milling. Slaughtering and meat packing are also extensively pursued. In the western part of the state, where Dodge City recalls the old days of cattle rustling, rich prairie land sprawls over a large area and gives an abundance of winter wheat and fine grazing.

Corn, sorghums, oats, barley, soy beans and potatoes are other crops. Besides oil, Kansas gets zinc, coal, salt and lead from its earth.

The state is the geographical center of the U. S. and the geodetic center of the North American continent, and as such is the area from which official longitudes and latitudes are measured.

Kansas City has the world's largest grain elevator and is the U. S. leader in producing hog serum. John Brown killed slavers in this state before he turned eastward in his effort to spread Negro insurrection.

Kansas is one of the three states that prohibits the sale of hard liquor.

Coronado, in his quest for the mythical city of Quivira, one of the seven cities of Cibola, first saw the state in 1541.

KENTUCKY

Entered Union & (rank): June 1, 1792 (15)

Motto: United We Stand, Divided We Fall

Flower: Goldenrod

Bird: Cardinal

Song: "My Old Kentucky Home"

Nickname: Blue Grass

Origin of name: from a Cherokee Indian word probably meaning "dark and bloody ground"

1940 population & (rank): 2,845,627 (16)

1948 est. pop. & (rank): 2,819,000 (19)

Area, sq. mi. & (rank): 40,395 (36)

Governor: Earle C. Clements (Dem., 1951)

Chief products: tobacco, whisky, horses

Chief cities: Louisville, Covington, Lexington, ... FRANKFORT

Kentucky prides itself on producing some of the nation's best tobacco, horses and whisky. The state stands high in the production of native asphalt, hemp, coal, corn and oil.

Among the manufactured items produced by its cities are furniture, aluminum ware, brooms, shoes, lumber products, machinery, textiles and iron and steel products. Besides coal and oil, Kentucky's important minerals are natural gas and quarry products.

Louisville, the largest city, famed for the Kentucky Derby at Churchill Downs, has a large municipal university, distills whisky and is a great cigarette maker. The Blue Grass country is the home of some of the world's finest race horses. Lexington, standing in the center of this country, is a leading tobaccoist. Mammoth Cave, with its many miles of underground passages, is a tourist attraction.

Kentucky was credited with a star in the Confederate flag because a secessionist group in the southwest part of the state set up a short-lived government and joined the Confederacy. The legitimate government, however, remained in the Union to the end.

Marquette and Joliet in 1673 first saw Kentucky when it was the "Dark and Bloody Ground," fiercely contested by Indian tribes. Daniel Boone explored the country in 1767.

LOUISIANA

Entered Union & (rank): Apr. 8, 1812 (1)

Seceded from Union: Jan. 26, 1861

Re-entered Union: May 29, 1865

Motto: Union, Justice and Confidence

Flower: Magnolia

Bird: Eastern Brown Pelican*

Song: "Song of Louisiana"

Nickname: Pelican

Origin of name: in honor of King Louis X of France

1940 population & (rank): 2,363,880 (21)

1948 est. pop. & (rank): 2,576,000 (21)

Area, sq. mi. & (rank): 48,523 (30)

Governor: Earl K. Long (Dem., 1952)

Chief products: sugar cane, rice, fish trapping, lumber

Chief cities: New Orleans, Shreveport, BATON ROUGE

Semi-tropical Louisiana, with much of land below sea level, is a natural leader in sugar cane, sweet potatoes and rice production. This state, which still calls its countyparishes after the Spanish religious divisions, is also the nation's leading fish trapper with a rich annual bag of min muskrat, opossum and raccoon pelts. Other products of importance are sulfur, oil, sugar cotton and lumber. Commercial fishing is extensive.

New Orleans, home of the Mardi Gras, avoids flooding only by an expensive levee and spillway system and the world's largest concentration of drainage pumps. The industry is making increased use of plastics materials from South and Central America. The Vieux Carré, in this Old World city called by many the "Little Paris" of the New World, has some of the celebrated restaurants of the nation.

No state has a greater variety of abundant game birds than Louisiana. state-owned wildlife sanctuaries are among the largest in the world.

Hernando de Soto saw the state in 1529 but claims are made for Narvaez, who is reputed to have first seen the state in 1528.

MAINE

Entered Union & (rank): Mar. 15, 1820 (1)

Motto: *Dirigo* (I guide)

Flower: White Pine Cone and Tassel

Bird: Chickadee

Song: "State of Maine Song"

Nickname: Pine Tree

Origin of name: from the French province of Maine

1940 population & (rank): 847,226 (35)

1948 est. pop. & (rank): 900,000 (35)

Area, sq. mi. & (rank): 33,215 (38)

Governor: Frederick G. Payne (Rep., 1955)

Chief products: potatoes, lumber, fish

Chief cities: Portland, Lewiston, Bangor, ... AUGUSTA

Maine, the largest potato grower in the nation, is supposed to be the political barometer of the nation because it holds a general election a little more than a month before the other states, a situation that brought forth the popular expression, "Maine goes, so goes the nation." But si

ne state is invariably Republican, the nation sometimes fails to follow it.

Maine has the largest forest area in the east, some 16,750,000 acres in timberland and, as a result, pulp and paper making are its leading industries. In addition to the potato crops, hay, oats, buckwheat and apples are grown. Other manufacturing pursuits are textiles, shoes and fruit canning.

Acadia National Park, on Mount Desert Island, approximately 50 miles southeast of Bangor, offers one of the finest examples of mountain and ocean scenery on the Atlantic coast.

With 2,465 lakes, hundreds of streams and embracing summer climate, Maine is famous as a resort state. Fishing is excellent and deer, bear and other game are plentiful. Its city of Eastport is the most easterly city in the U. S., and York was the first chartered city (in 1642) in the nation.

Samuel de Champlain looked over Maine's rugged area in 1604 but the Cabots probably first saw it at least a century earlier.

MARYLAND

Entered Union & (rank): Apr. 28, 1788 (7)
Motto: *Fatti Maschii Parole Femine* (Deeds to the men, words for the women)

Flower: Black-eyed Susan

Bird: Baltimore Oriole*

Song: "Maryland! My Maryland!"

Nickname: Old Line; Free

Origin of name: in honor of Henrietta Maria (Queen of Charles I of England)

1940 population & (rank): 1,821,244 (28)

1948 est. pop. & (rank): 2,148,000 (25)

Area, sq. mi. & (rank): 10,577 (41)

Governor: William Preston Lane, Jr. (Dem., 1951)

Chief products: tobacco, mfd. goods, general agriculture

Chief cities: Baltimore, Cumberland, Hagerstown, ... ANNAPOLIS

Maryland, a leader in vegetable canning, is cut almost in two by the upthrust of the Chesapeake Bay, and with its many streams in this area, it has probably the most river frontage of any of the states. The state is one of the largest chicken raisers in the east and the Chesapeake is the largest crabbing center in the world. In addition to all kinds of vegetables, the state also grows wheat, hay, corn, potatoes and barley. Coal, sand and gravel, cement and stone are the leading mineral products.

The manufacturing products of its cities range from airplanes, steel, clothing, chemicals to meat packing. Annapolis is the site of the U. S. Naval Academy. The state capitol, built in 1772, is the only one besides that of Massachusetts to antedate the revolution.

Maryland, like Delaware, still retains the whipping post, but it is kept more as a historical oddity than for punishment.

The state was settled in 1632 at St. Marys in the Chesapeake Bay region under an English charter granted to Lord Baltimore and the grant at that time embraced all present Maryland, Delaware and part of Pennsylvania.

MASSACHUSETTS

Entered Union & (rank): Feb. 6, 1788 (6)

Motto: *Ense Petit Placidam Sub Libertate Quietem*
(By the sword we seek peace, but only under liberty)

Flower: Mayflower

Bird: Chickadee

Song: "Massachusetts"*

Nickname: Bay; Old Colony

Origin of name: from two Indian words meaning "great mountain place"

1940 population & (rank): 4,316,721 (8)

1948 est. pop. & (rank): 4,718,000 (9)

Area, sq. mi. & (rank): 8,257 (44)

Governor: Paul A. Dever (Dem., 1951)

Chief products: textiles, hay, machinery, shoes

Chief cities: BOSTON, Worcester, Springfield, Fall River, Cambridge

From the beginning of American history, Massachusetts has led the nation in the making of textiles and Boston has been the biggest U. S. wool market. Despite the dominance of textiles, the factories of this state are famous for a great variety of products such as shoes, watches, machinery, soap and candy, machine tools, wire products, small arms and electrical machinery. The value of the state's fishing products is the highest in the Northeastern area. Boston and Gloucester have superseded Nantucket and New Bedford, of olden-day whaling fame, as the great fishing ports of contemporary America. The principal crops of this state are tobacco, potatoes, wheat, corn, oats, buckwheat and apples.

The growth of factories brought to this state an influx of foreigners and today Boston has one of the largest Irish populations in the nation. Boston became prominent as the "Cradle of Liberty" in early days and it was here that Paul Revere rode from Christ Church on Copp's Hill and the Battle of Bunker Hill was fought.

Small glacial lakes are scattered throughout the state.

The Pilgrims landed at Plymouth Rock in 1620 as the first large group to settle here but legend has it that Eric the Red and his Norsemen first saw the state in the year 1000.

MICHIGAN

Entered Union & (rank): Jan. 26, 1837 (26)

Motto: *Si Quæris Peninsulam Amœnam Circumspice*
(If you seek a pleasant peninsula, look around you)

Flower: Apple Blossom

Bird: Robin

Song: "Michigan, My Michigan"*

Nickname: Wolverine; Lake

Origin of name: from an Indian word meaning "turtle"

1940 population & (rank): 5,256,106 (7)

1948 est. pop. & (rank): 6,195,000 (7)

Area, sq. mi. & (rank): 58,216 (22)

Governor: G. Mennen Williams (Dem., 1951)

Chief products: automobiles, vegetables, fruit

Chief cities: Detroit, Grand Rapids, Flint, ... LANSING

On a map of Michigan, draw an eighty-five-mile circle around Detroit and it will contain the home plants of the companies that make nine out of ten American automobiles. This vast industry, which sprang up about fifty years ago from the carriage-building business, is not the only activity of this state. Airplanes, furniture (Grand Rapids is the furniture center of the U. S.), diesel engines, hoists, pumps, boilers are among its leading items of production. Most of the nation's refrigerators are made in Michigan. Its fertile farm areas grow dry beans, grapes and peaches, potatoes and sugar beets.

Michigan is the only state that is split completely in two parts. The northern peninsula is mining and timber country. The southern part is agricultural and manufacturing country. Connecting Lakes Superior and Huron is the busiest canal in the world—the Sault Ste. Marie. Its 6,000 inland lakes and 2,300 miles of Great Lakes shoreline make it a good vacation land.

Michigan has the greatest inland fisheries in the world and markets at least 20 species from carp, trout, perch, pike to lake herring. The artificial skiing on Iron Mountain is probably the highest in the world.

Jacques Cartier first saw the state in 1535.

MINNESOTA

Entered Union & (rank): May 11, 1858 (32)

Motto: *L'étoile du Nord* (Star of the north)

Flower: Moccasin flower

Bird: American Goldfinch*

Song: "Hail! Minnesota"*

Nickname: Gopher; North Star

Origin of name: from a Dakota Indian word meaning "sky-tinted water"

1940 population & (rank): 2,792,300 (18)

1948 est. pop. & (rank): 2,940,000 (17)

Area, sq. mi. & (rank): 84,068 (11)

Governor: Luther W. Youngdahl (Rep., 1951)

Chief products: iron ore, wheat

Chief cities: Minneapolis, ST. PAUL, Duluth

A few square miles of Northern Minnesota, in the Mesabi, Cuyuna and Vermillion Ranges, produce most of the nation's iron ore, and provide the activity for the port of Duluth. Farm and factory are equally important in Minnesota. Its farms produce oats, butter, eggs, milk, corn, wheat, potatoes, etc. Its factory production follows the pattern of the Midwest. Machinery, furniture, foundry products, etc. are made here.

St. Paul, whose twin city of Minneapolis faces it on the other side of the Mississippi, is the nation's biggest publisher of calendars and law books. With over 11,000 lakes, the state is famous for its fishing, and deer, bear and fur trapping. Lake Itasca is the source of the Mississippi.

The Arrowhead, covering ten counties in Northeastern Minnesota, and the district centering about the Detroit lakes, are famous resort regions.

Radisson and Groseilliers, French traders from Canada, first saw the state in 1655.

MISSISSIPPI

Entered Union & (rank): Dec. 10, 1817 (20)

Seceded from Union: Jan. 9, 1861

Re-entered Union: Feb. 23, 1870

Motto: *Virtute et Armis* (By valor and arms)

Flower: Magnolia

Bird: Mockingbird*

Song: "Mississippi"*

Nickname: Magnolia

Origin of name: from an Indian word meaning "the great water"

1940 population & (rank): 2,183,796 (23)

1948 est. pop. & (rank): 2,121,000 (26)

Area, sq. mi. & (rank): 47,716 (31)

Governor: Fielding L. Wright (Dem., 1952)

Chief product: cotton

Chief cities: JACKSON, Meridian, Vicksburg

Mississippi, the stronghold of the Old South, is one of the least industrial of the states. More than half of its population makes a living directly from the soil and cotton is still king in this state. The world's largest cotton plantation of 35,000 acres is located at Scott. Other crops are corn, peanuts, oats, pecans and sugar cane. Despite its agricultural nature, Mississippi reflects the southern trend toward industrialization and its factory products are centered around cotton, iron and lumber products.

Mississippi's Central Hills have produced a serious soil-erosion problem due to the virtual over-emphasis placed on cotton growing through the years.

Mississippi was the first state to ratify the Eighteenth Amendment and is still one of the three states that bans the sale of hard liquor. In 1940, it had the second largest Negro population, Georgia having the largest. The state abounds in historic landmarks and is the home of the Vicksburg National Military Park commemorating Grant's military victory on this site.

Hernando de Soto first saw the state in 1540.

MISSOURI

Entered Union & (rank): Aug. 10, 1821 (2)

Motto: *Salus Populi Suprema Lex Esto* (Let the welfare of the people be the supreme law)

Flower: Hawthorn

Bird: Bluebird

Song: "Missouri"*

Nickname: Show-me

Origin of name: from an Indian word probably meaning "muddy water"

1940 population & (rank): 3,784,664 (10)

1948 est. pop. & (rank): 3,947,000 (10)

Area, sq. mi. & (rank): 69,674 (18)

Governor: Forrest Smith (Dem., 1953)

Chief products: corn, minerals, livestock, railroads

Chief cities: St. Louis, Kansas City, JEFFERSON CITY

Missouri, touching both South and North, ranks highest in mining lead, making corn cobs pipes and breeding mules. Sometimes called the "saddle horse capital of the world" because of its excellent breeds, the state also grows corn, wheat, oats, barley

potatoes, tobacco and cotton on its fertile level land climbing to the Ozark Mountains. This country of rugged, timbered hills and deep valleys, has more than 10,000 swift-flowing streams. Its industrial plants produce automobiles, shoes, drugs, chemicals, beer and street cars.

Eads Bridge, spanning the Mississippi River at St. Louis, probably handles more freight cars than any other bridge in the world. Bagnell Dam, across the Osage River in the Ozarks, completed in 1931, created one of the largest artificial lakes in the world, running for 129 miles and having a shoreline of approximately 1,300 miles.

The homes of two of Missouri's most publicized sons—Mark Twain and Jesse James—are tourist attractions.

Missouri, like Kentucky, had a star in the Confederate flag because a minority of the state legislature adopted an ordinance of secession. The Governor and pro-secession legislature, however, were ousted and the state remained in the Union.

The French explorer, La Salle, first saw Missouri in 1682.

MONTANA

Entered Union & (rank): Nov. 8, 1889 (41)

Motto: *Oro y Plata* (Gold and silver)

Flower: Bitterroot

Bird: Western Meadow Lark

Song: "Montana"

Nickname: Treasure

Origin of name: from the Latin meaning "mountainous regions"

1940 population & (rank): 559,456 (39)

1948 est. pop. & (rank): 511,000 (44)

Area, sq. mi. & (rank): 147,138 (3)

Governor: John W. Bonner (Dem., 1953)

Chief products: copper, wheat

Chief cities: Butte, Great Falls, Billings,

HELENA

Montana's story is the old Western story—few settlers until a gold strike in 1858 brought an influx. But in the last 50 years his state became unique in the nation in what it has lost in population. Mining is its present occupation, and lead, zinc, silver, coal and oil are taken from its earth.

Butte, sitting on the "richest hill in the world," is the center of the area that once supplied half of the U. S. copper (its most important mineral). Livestock, wool, lumber and dude ranching round out its interests. Agriculture is dependent on irrigation.

The state as a whole still possesses the rank character of the old days, reflected in the legend that the only reason Helena was selected as the name to replace Last Chance Gulch was because of the suggestion of profanity in the front part of that name. Glacier National Park is a popular tourist area with its rugged scenery, hunting areas and dude ranches. While little development has as yet been made, Montana offers fine potentialities for winter sports. Snow conditions are good in the winter in the National Forest Service areas.

French traders, probably sons of Verendrye, first explored the state in 1742.

NEBRASKA

Entered Union & (rank): Mar. 1, 1867 (37)

Motto: Equality Before the Law

Flower: Goldenrod

Bird: Western Meadow Lark

Song: "Dear Old Nebraska"

Nickname: Tree Planters

Origin of name: from an Oto Indian word meaning "flat water"

1940 population & (rank): 1,315,834 (32)

1948 est. pop. & (rank): 1,301,000 (33)

Area, sq. mi. & (rank): 77,237 (14)

Governor: Val Peterson (Rep., 1951)

Chief products: corn, wheat

Chief cities: Omaha, LINCOLN, Grand Island, Hastings

Nebraska lives by its expansive sea of grain, reflected in its bumper crops of rye, corn and wheat. There are more varieties of grass growing in this state, valuable for forage, than in any other state in the nation. Its sizeable cattle and hog industry help to make Omaha a great stockyard and meat-packing center. Flour, freight cars, brick and tile are Nebraska's factory products.

One of the world's largest creameries is at Lincoln. Oil was discovered in 1939 and has since grown into a large industry. In 1937, after a constitutional amendment three years earlier, Nebraska became the only state in the union to have a unicameral legislature, a one-house law-making group to which members are elected without party designation.

Spanish Coronado saw Nebraska first in 1541.

NEVADA

Entered Union & (rank): Oct. 31, 1864 (36)

Motto: All for Our Country

Flower: Sagebrush

Bird: Mountain Bluebird*

Song: "Home Means Nevada"

Nickname: Silver; Sagebrush

Origin of name: from the Spanish meaning "snow-clad"

1940 population & (rank): 110,247 (48)

1948 est. pop. & (rank): 142,000 (48)

Area, sq. mi. & (rank): 110,540 (6)

Governor: Vail Pittman (Dem., 1951)

Chief products: silver, livestock

Chief cities: Reno, Las Vegas, ... CARSON CITY

Nevada, the smallest state in population, had in 1940 little more than one person per square mile. It was made famous by the discovery of the fabulous Comstock Lode in 1859, and has since lived mainly on its mines which give up large quantities of gold, silver, copper, lead, zinc, quicksilver and tungsten. In 1931, the state created a new industry by writing an easy divorce law and Reno has since become the "divorce capital of the nation." Gambling was legalized and the gaming tables now pay a one-percent tax to add to the state's income.

Near Las Vegas, on the Colorado River, stands the Hoover Dam which has twice changed its name (Hoover to Boulder to

Hoover), the highest in the world at 726 feet. This dam is responsible for the state's agricultural crop of wheat, barley and potatoes. Carson City is the smallest state capital in population in the U. S. Nevada was the first in the world to use gas for capital punishment.

Francisco Garcés, a Franciscan friar en route to California, first saw Nevada's rugged scenery in 1775.

NEW HAMPSHIRE

Entered Union & (rank): June 21, 1788 (9)

Motto: Live Free or Die

Flower: Purple Lilac

Bird: Purple Finch*

Song: "Old New Hampshire"*

Nickname: Granite

Origin of name: from the English county of Hampshire

1940 population & (rank): 491,524 (44)

1948 est. pop. & (rank): 548,000 (42)

Area, sq. mi. & (rank): 9,304 (43)

Governor: Sherman Adams (Rep., 1951)

Chief products: dairy products, mfd. goods

Chief cities: Manchester, Nashua, CONCORD

New Hampshire is the only state that ever played host at the formal conclusion of a foreign war when, in 1905, it was the scene of the treaty ending the Russo-Japanese War at Portsmouth. The sandy and stony loam of this state needs liberal fertilization for the growing of its principal crops—fruit, truck vegetables, corn, oats, hay and potatoes. Its manufacturing centers in the production of textiles, leather goods, pulp and paper products.

New Hampshire was the first state to declare its independence from Great Britain and to adopt a constitution. Mt. Washington has recorded some of the world's strongest wind velocities, the last recording of record proportions being registered at 231 miles per hour. The state also has the largest legislative body, a group of law makers adding to 424.

With 1,300 lakes and good climate for both winter sports and summer vacations, the state is highly popular as a resort area.

Martin Pring, an English sailor, was probably the first white man to see the state in 1603.

NEW JERSEY

Entered Union & (rank): Dec. 18, 1787 (3)

Motto: Liberty and Prosperity

Flower: Purple Violet

Bird: Eastern Goldfinch

Song: "Ode to New Jersey"*

Nickname: Garden

Origin of name: from the Channel Island of Jersey

1940 population & (rank): 4,160,165 (9)

1948 est. pop. & (rank): 4,729,000 (8)

Area, sq. mi. & (rank): 7,836 (45)

Governor: Alfred E. Driscoll (Rep., 1950)

Chief products: mfd. goods, vegetables

Chief cities: Newark, Jersey City, Paterson, TRENTON

New Jersey is one of the most intensely industrial areas of the nation in spite of its small size; its northern part is sometimes called "America's Ruhr." This manufacturing dynamo, whose greatest single industry is the making of electrical machinery, also makes dyed textiles, chemicals, paints, elevators, silk products, pottery, pen points and warships. At its southern point, the activity is focused in an extensive truck gardening business. New Jersey's seaports are among the busiest in the nation.

The oldest U. S. highway was built in Warren County in 1650; the first lighthouse in America was built in 1764 at Sandy Hook. Outside of Morristown is the Seeing Eye Training School, where dogs are trained to lead the blind.

Because of its extended seaboard, New Jersey is a popular resort state, especially during the summer months. Its 120 miles from Sandy Hook to Cape May have at least 40 beaches which make it a great playground.

New Jersey was first seen by Giovanni da Verrazano, a Florentine sailor, carrying French papers, in 1524.

NEW MEXICO

Entered Union & (rank): Jan. 6, 1912 (47)

Motto: *Crescit eundo* (It grows as it goes)

Flower: Yucca

Bird: Road Runner*

Song: "O, Fair New Mexico"

Nickname: Sunshine

Origin of name: from the country of Mexico

1940 population & (rank): 531,818 (41)

1948 est. pop. & (rank): 571,000 (40)

Area, sq. mi. & (rank): 121,666 (4)

Governor: Thomas J. Mabry (Dem., 1951)

Chief products: minerals, livestock

Chief cities: Albuquerque, SANTA FE, Roswell

Bilingual New Mexico is the only state where both English and Spanish are accepted as official languages. The two cultures of this state give it a picturesque character that attracts many tourists. Mining and the raising of cattle and crops provide the state's chief interests. Irrigation is vital.

The state contains the largest Indian reservation in the U. S. with over 16,000,000 acres, inhabited by the Navajo tribe. The Apaches and Utes live in three other reservations in this state (the Jicarilla Apache at Horse Lake; the Mescalero Apache northeast of Alamogordo; the Navajo, San Juan and McKinley counties; and the Southern Ute, in the northern part of San Juan County). Carlsbad Caverns, the largest in the world, attract many visitors annually. The highest golf course in the world, over 9,000 feet above sea level, is near Alamogordo.

The state's dry and healthful climate makes it a great recuperative mecca for tuberculars. Santa Fe, the oldest seat of government in the U. S., founded by the Spaniards in 1609-10, is a sight-seers' paradise, as well as a health resort.

Cabeza de Vaca was the first to traverse the state in 1528.

NEW YORK

Entered Union & (rank): July 26, 1788 (11)
 Motto: *Excelsior* (Higher)
 Flower: Rose*
 Bird: Bluebird*
 Song: "The Sidewalks of New York"*
 Nickname: Empire
 Origin of name: in honor of the English Duke of York
 1940 population & (rank): 13,479,142 (1)
 1948 est. pop. & (rank): 14,386,000 (1)
 Area, sq. mi. & (rank): 49,576 (29)
 Governor: Thomas E. Dewey (Rep., 1951)
 Chief products: textiles, printing, shipping, dairy products, railroads
 Chief cities: New York, Buffalo, Rochester, Syracuse, ... ALBANY

New York, with the great metropolis of New York City, is the spectacular nerve center of the nation. It leads in population, manufacturing, foreign trade, commercial and financial transactions, book and magazine publishing, theatrical production and a host of other fields.

New York City is not only a national but an international leader. It is the busiest seaport in the world; its airport at La Guardia Field was the world's largest commercial airport until supplemented by the Idlewild Field. First in manufacturing since 1824, the city today has a gigantic clothing and fur industry and also makes chemicals, paints, drugs, machinery, paper, wood and textile products and houses the tallest buildings in the world. Nearly all the rest of the state's manufacturing is done along the Hudson River north to Albany and runs from planes, flour, photographic and optical equipment, shirts, typewriters, washing machines to auto bodies and parts. Dairying, truck gardening, the raising of potatoes, onions, cabbage keep the New York farmer prosperous. The growing of grapes and the making of wine is a major industry.

New York's extremely rapid commercial growth may be partly attributed to Governor De Witt Clinton who pushed through the construction of the Erie Canal, which was formally opened in 1825. The canal, the first of the great man-made waterways in the U. S., opened a new vista of commercial expansion.

The state leads the nation and the world as a tourist attraction. The convention and tourist business is the state's fifth greatest source of income and the famous resort areas upstate in and around Lakes Champlain and George abound in winter sports.

For a short time, New York City was the U. S. Capital and George Washington was inaugurated there as the first President on April 30, 1789. It is a key state in any national election, and so significant in the life of the country that any New York Governor is likely to become a presidential possibility.

Henry Hudson first discovered New York in 1609 in his trip up the river later named in his honor, and on the basis of his explorations, the Dutch bought the island of Manhattan for \$24 from the Indians.

NORTH CAROLINA

Entered Union & (rank): Nov. 21, 1789 (12)
 Seceded from Union: May 20, 1861
 Re-entered Union: July 20, 1868
 Motto: *Esse Quam Videri* (To be rather than to seem)
 Flower: Dogwood
 Bird: Chickadee*
 Song: "The Old North State"
 Nickname: Tarheel; Old North
 Origin of name: in honor of King Charles I of England
 1940 population & (rank): 3,571,623 (11)
 1948 est. pop. & (rank): 3,715,000 (12)
 Area, sq. mi. & (rank): 52,712 (27)
 Governor: W. Kerr Scott (Dem., 1953)
 Chief products: tobacco, cotton
 Chief cities: Charlotte, Winston-Salem, Durham, ... RALEIGH

North Carolina is the nation's busiest tobaccoist. Its factories—the biggest are in Durham and Winston-Salem—make more than half of all the cigarettes smoked in this country. Add to this the output of clothing factories and the cotton mills and the state stands high in manufacturing. Its agricultural output is centered in the growing of corn, cotton, hay, peanuts and fruit. The red spruce stand (the U. S. largest) in the Great Smoky National Park has caused the rise of the furniture business in this state in recent years.

North Carolina has led the field in many economic and social reforms. It is still the only Southern state that pays its Negro teachers the same salary it does its white teachers. Its school bus system, operated by certified student drivers, transports more children to school and back home again than any other state in the Union. The state has many streams and falls and has, therefore, a high potential for hydroelectric power. The resort business both at the shore and in the mountains is extensive. Virginia Dare, the first white child of English parentage in North America, was born in this state in 1587.

Giovanni da Verrazano was the first white man to visit this state in 1524.

NORTH DAKOTA

Entered Union & (rank): Nov. 2, 1889 (39)
 Motto: Liberty and Union, Now and Forever; One and Inseparable
 Flower: Wild Prairie Rose
 Bird: Western Meadow Lark*
 Song: "North Dakota State Song"*
 Nickname: Flickertail; Sioux
 Origin of name: from the Dakota tribe meaning "united in friendly compact"
 1940 population & (rank): 641,935 (38)
 1948 est. pop. & (rank): 560,000 (41)
 Area, sq. mi. & (rank): 70,665 (16)
 Governor: Fred G. Aandahl (Rep., 1951)
 Chief products: wheat, rye
 Chief cities: Fargo, Grand Forks, Minot, BISMARCK

North Dakota, politically progressive, operates the only state-owned bank, flour mill and grain elevator in the nation. The

state owes its main activity to agriculture with over 87 percent of its acreage devoted to the growth of barley, wheat, rye, oats. Most of its manufacturing—the making of butter, cheese, flour and milk products—is tied directly to the land.

The finest farming land is in the Red River Valley, celebrated in song. Cattle raising is centered in the Missouri Valley.

"Number One Northern Hard," a wheat first grown in this state, still brings premium prices for its excellence of quality. Sacajawea, a Shoshoni Indian woman, is probably North Dakota's most notable person. In 1805 she joined Lewis and Clark and made herself so useful as guide and diplomat that the expedition might have been lost without her. Geologists believe that this state holds two-thirds of American deposits of lignite.

A French trader in furs, Verendrye, first entered the state from Canada in 1738.

OHIO

Entered Union & (rank): Feb. 19 or Mar. 1, 1803 (disputed) (17)

Motto: None

Flower: Scarlet Carnation

Bird: Cardinal

Song: "Ohio, My Ohio"

Nickname: Buckeye

Origin of name: from a Wyandot word meaning "great river"

1940 population & (rank): 6,907,612 (4)

1948 est. pop. & (rank): 7,799,000 (5)

Area, sq. mi. & (rank): 41,222 (34)

Governor: Frank J. Lausche (Dem., 1951)

Chief products: mfd. goods, general agriculture, rubber, steel

Chief cities: Cleveland, Cincinnati, COLUMBUS, Toledo, Akron

With vast coal and oil fields on the one hand, with Great Lakes iron ore close by on the other, Ohio automatically developed into one of the nation's greatest industrial states. The vast and varied factory output of its cities runs from wire, nails, nuts, bolts, paper, radios, cash registers, golf clubs, refrigerators to motors of all kinds and sizes. Cleveland is the world's largest handler of iron ore. Toledo is one of the nation's largest shippers of coal. Akron makes most of the auto tires used in the country.

Ohio's thousands of factories almost overshadow its importance in two other basic industries—mining and agriculture. Its fertile soil produces soy beans, corn, wheat, grapes, tobacco. Dairying is extensive. Mining is centered in coal, oil, sand and gravel and clay production.

Ohio is called the "Mother of Presidents," because it has sent to the White House seven men, five of whom were elected from that state and two of whom were born in Ohio but elected from other states.

In 1749, Céleron, a French officer, reached the Ohio River from Canada and claimed the area for the French, disregarding the grants of the British Kings, which covered this area.

OKLAHOMA

Entered Union & (rank): Nov. 16, 1907 (46)

Motto: *Labor Omnia Vincit* (Labor conquers all)

Flower: Mistletoe

Bird: Bobwhite*

Song: "Oklahoma (A Toast)"

Nickname: Sooner

Origin of name: from two Choctaw Indian words meaning "red people"

1940 population & (rank): 2,336,434 (22)

1948 est. pop. & (rank): 2,362,000 (23)

Area, sq. mi. & (rank): 69,919 (17)

Governor: Roy J. Turner (Dem., 1951)

Chief products: oil, zinc, corn, wheat

Chief cities: OKLAHOMA CITY, Tulsa, Muskogee

Oil has made Oklahoma a rich state and Tulsa one of the world's wealthiest cities per capita. The smelting of zinc, oil refining, meat packing and flour milling are its chief factory industries. Corn, oats, cotton, sorghums and potatoes are its agricultural crops of chief importance.

In 1834, Oklahoma was set aside as Indian Territory and remained so until noon, April 22, 1889, when it was opened up to homesteaders. On that one day, 50,000 people swarmed in and the term "sooners" was born to apply to those who had sneaked into the state sooner than the noon deadline. Today, Oklahoma has the biggest U. S. Indian population, 63,125 according to the 1940 census, many of whom are rich because of the oil discovered on their land. The state is one of the three in the nation which prohibits the sale of hard liquor.

Coronado first saw Oklahoma in 1540 while searching for the mythical city of Quivira.

OREGON

Entered Union & (rank): Feb. 14, 1859 (32)

Motto: The Union

Flower: Oregon Grape

Bird: Western Meadow Lark

Song: "Oregon, My Oregon"

Nickname: Beaver; Sunset

Origin of name: probably from the Shoshoni Indian words meaning "a place of plenty"

1940 population & (rank): 1,089,684 (34)

1948 est. pop. & (rank): 1,626,000 (32)

Area, sq. mi. & (rank): 96,981 (9)

Governor: Douglas McKay (Rep., 1953)

Chief products: electricity, lumber, fish

Chief cities: Portland, SALEM, Eugene

Oregon, with the greatest U. S. reserve of standing timber, lives on its lumber and fish. Its salmon fishing industry, centered at Astoria at the mouth of the Columbia River, is one of the world's largest. The state leads in growing hops and also raises nuts, wheat, hay, oats and potatoes. Mercury, chromite and antimony are mined in quantity.

Oregon's coast is lush and green with very heavy rainfall. Its factories produce lumber and food products, flour and machinery.

Bonneville Dam lies in Oregon and helps make the state a great source of electric power. Oregon was the first of the fa

Western states to be settled without the help of a major gold rush.

Bruno Heceta, a Spaniard, in 1775, was the first known to have landed there.

PENNSYLVANIA

Entered Union & (rank): Dec. 12, 1787 (2)

Motto: Virtue, Liberty and Independence

Flower: Mountain Laurel

Bird: Ruffed Grouse

Song: "Pennsylvania"*

Nickname: Keystone

Origin of name: in honor of William Penn

1940 population & (rank): 9,900,180 (2)

1948 est. pop. & (rank): 10,689,000 (2)

Area, sq. mi. & (rank): 45,333 (32)

Governor: James H. Duff (Rep., 1951)

Chief products: coal, iron and steel, aluminum, mfd. goods

Chief cities: Philadelphia, Pittsburgh, Scranton, ... HARRISBURG

From the steel mills of Pittsburgh through the mid-state coal mines and oil wells to the shipyards and factories of Philadelphia, Pennsylvania bristles with heavy industry. Iron and steel are the state's trademarks. Today about half of U. S. iron and steel is made in the Pittsburgh area. Electrical machinery, textiles, boilers, engines, knit goods, locomotives, wire, trucks, buses, silk products, blast furnaces and other heavy products are made in the countless factories of this state. Philadelphia is the second busiest port in the U. S. and was the third largest city in population in 1940. Pennsylvania contains virtually all the U. S. anthracite (hard coal) deposits. As a farmer the state stands high in buckwheat, tobacco, apples, potatoes, corn, wheat, barley, hay and peaches.

Pennsylvania is rich in historical lore. Philadelphia was the seat of the Federal government almost continuously from 1776 until 1800, and there the Declaration of Independence was signed and the Constitution drawn up. Valley Forge of the Revolution, and Gettysburg, the turning-point of the Civil War, are both in Pennsylvania. The Liberty Bell stands in Independence Square in Philadelphia.

Henry Hudson anchored in Delaware Bay during his trip up the Hudson in 1609 and gave the Dutch first claim to the state. In 1681, William Penn, the Quaker, founded its first colony.

RHODE ISLAND

Entered Union & (rank): May 29, 1790 (13)

Motto: Hope

Flower: Violet*

Bird: Bobwhite*

Song: "Rhode Island"*

Nickname: Little Rhody

Origin of name: from the Greek island of Rhodes

1940 population & (rank): 713,346 (36)

1948 est. pop. & (rank): 748,000 (36)

Area, sq. mi. & (rank): 1,214 (48)

Governor: John O. Pastore (Dem., 1951)

Chief products: textiles, mfd. goods

Chief cities: PROVIDENCE, Pawtucket, Woonsocket

Little Rhode Island (it would fit into Texas 220 times), with the greatest density of population barring the District of Columbia, boasts the greatest per-capita industrial output of all the states, and the bulk of its products comes from the textile mills of Pawtucket, Providence and Woonsocket. Providence is also one of the largest U. S. jewelry centers.

Though more than nine-tenths of the people live in the cities, the southern part of the state is interested in dairying and truck farming in spite of the sterility of the boulder clay soil. Potatoes, corn, apples, oats and hay lead the crop list.

Newport is the site of the Naval War College and was long a show place for the luxurious summer homes built by some of New York's wealthiest people.

Roger Williams founded Providence, and subsequently Rhode Island, in 1636 after he had been banished from Massachusetts for nonconformance to religious doctrine. William Blackstone, a fugitive from Massachusetts, is reputed to have settled in what is now Cumberland, before this date.

SOUTH CAROLINA

Entered Union & (rank): May 23, 1788 (8)

Seceded from Union: Dec. 20, 1860

Re-entered Union: July 18, 1868

Motto: *Dum Spiro, Spero* (While I breathe, I hope)

Flower: Yellow Jessamine

Bird: Carolina Wren*

Song: "Carolina"

Nickname: Palmetto

Origin of name: same as North Carolina

1940 population & (rank): 1,899,804 (26)

1948 est. pop. & (rank): 1,991,000 (28)

Area, sq. mi. & (rank): 31,055 (39)

Governor: J. Strom Thurmond (Dem., 1951)

Chief products: cotton, rice

Chief cities: Charleston, COLUMBIA, Greenville, Spartanburg

Once primarily agricultural, South Carolina has built so many big cotton textile mills that today the state's factories double the output of its farms in cash value. Agriculture has not, however, been completely replaced and today its chief crops are cotton, tobacco, peaches, corn, hay, oats, sweet potatoes and peanuts which are enhanced by the recent development of modern soil conservation methods. Charleston, the largest city and busiest seaport, makes asbestos, wood, pulp and steel products.

South Carolina is the only state, at present, in which divorce is not possible. Civil War hostilities were started in this state at Charleston, when, on April 12, 1861, South Carolina men bombarded and captured Fort Sumter. It was in Charleston harbor, too, that the first submarine was used in warfare.

Vasquez de Ayllon, who came from Santo Domingo with about 500 settlers in 1526, made the first attempt to colonize this state but the expedition was later wiped out by Indians. In succeeding years, Spanish attempts were successful.

SOUTH DAKOTA

Entered Union & (rank): Nov. 2, 1889 (40)
Motto: Under God the People Rule
Flower: Pasqueflower
Bird: Pheasant
Song: "Hail South Dakota"
Nickname: Coyote
Origin of name: same as North Dakota
1940 population & (rank): 642,961 (37)
1948 est. pop. & (rank): 623,000 (39)
Area, sq. mi. & (rank): 77,047 (15)
Governor: George T. Mickelson (Rep., 1951)
Chief products: wheat, gold, silver
Chief cities: Sioux Falls, Aberdeen, Rapid City, ... **PIERRE**

Seventy-five percent of the population of South Dakota is actively interested in agriculture. Its leading crops are rye, in which it leads the nation, barley, oats, corn, wheat. Cattle raising and dairying are its stronger industries. This state of extremes contains at the same time the richest U. S. gold mine, the Homestake, at Lead, and the lowest paid Governor of the states.

The Black Hills, a great tourist attraction, are the highest mountains east of the Rockies. Mt. Rushmore, in this group, is celebrated for the likenesses of Washington, Jefferson, Lincoln and Theodore Roosevelt, which were carved in stone by the late Gutzon Borglum. The Badlands offer very scenic masses of bare rock and clay unrelieved by any vegetation. It was in this state that the Sioux Indians, angered at the influx of the white men who were searching for gold, started the hostilities which ended in Custer's Massacre, on June 25, 1876, in Montana. South Dakota has the smallest county in the nation, Armstrong County, which had, in 1940, a population of forty-two and in the 1944 election, a recorded vote of four, all cast for F. D. Roosevelt.

The French trader, Verendrye, first saw this state in 1743, when he came down from Canada looking for a western ocean.

TENNESSEE

Entered Union & (rank): June 1, 1796 (16)
Seceded from Union: June 24, 1861
Re-entered Union: July 24, 1866
Motto: Agriculture, Commerce
Flower: Iris
Bird: Mockingbird
Song: "My Homeland, Tennessee"
Nickname: Volunteer
Origin of name: from the name of the ancient capital of the Cherokee tribe
1940 population & (rank): 2,915,841 (15)
1948 est. pop. & (rank): 3,149,000 (14)
Area, sq. mi. & (rank): 42,246 (33)
Governor: Gordon Browning (Dem., 1951)
Chief products: cotton, light metals, electricity
Chief cities: Memphis, NASHVILLE, Chattanooga

Tennessee won world prominence in 1945 for a single product—the atom bomb which was made at the Clinton Engineer Works at Oak Ridge. Aside from that distinction,

Tennessee is predominantly agricultural and is affected by the steady trend toward industrialization by the South. Cotton, corn, wheat, oats, barley, hay, potatoes and peanuts are its important crops. Its industry tied up with its agriculture, and cotton mills form the bulk of its industrial trend.

Tennessee is also the home of the TV, that great enterprise of 13 dams (Norris being the largest) benefiting this state and six others (Kentucky, Alabama, North Carolina, Georgia, Virginia and Mississippi) in flood control, water power, navigation, electrical power. The artificial lakes created by this massive undertaking form a continuous body of water 650 miles long and make for excellent recreation, affording swimming, fishing, hunting and boating.

The Battle of Shiloh was fought in this state during the Civil War, and the one fought on Lookout Mountain was called "The battle above the clouds."

Hernando de Soto first saw the state in 1541.

TEXAS

Entered Union & (rank): Dec. 29, 1845 (2)
Seceded from Union: March 2, 1861
Re-entered Union: Mar. 30, 1870
Motto: Friendship
Flower: Bluebonnet
Bird: Mockingbird
Song: "Texas, Our Texas"
Nickname: Lone Star
Origin of name: from an Indian word meaning "friends"
1940 population & (rank): 6,414,824 (6)
1948 est. pop. & (rank): 7,230,000 (6)
Area, sq. mi. & (rank): 267,339 (1)
Governor: Beauford H. Jester (Dem., 1951)
Chief products: cattle, cotton, oil, natural gas
Chief cities: Houston, Dallas, San Antonio ... **AUSTIN**

Big, sprawling, vigorous Texas, comprising one-twelfth of the entire area of the United States, is the richest political subdivision in the world with the possible exception of the Russian Ukraine, and is the only state that may, by Congressional statute, divide into five parts if it so desires. There is very little possibility of this ever being done because Texas and Texans like it by its bigness. Texas is a natural leader in the production of oil, natural gas, cotton, beef cattle, helium, sulfur, sheep, wool, onions and turkeys.

The distance from El Paso to Beaumont is a greater distance than from New York to Chicago. Texas supports possibly the most ardent local enthusiasts in the nation who are always quick to boast of her richness, beautiful girls, size.

Amarillo has the only U. S. helium plant over the Neches River, at Port Arthur, the most elevated highway bridge in the world. In Pecos County is the deepest hole in the world—an oil well that goes down 15,279 feet.

Cabeza de Vaca first explored this state in 1528.

UTAH

Entered Union & (rank): Jan. 4, 1896 (45)
Motto: Industry
Flower: Sego Lily
Bird: Sea Gull*
Song: "Utah We Love Thee"
Nickname: Beehive; Salt Lake
Origin of name: from the Ute tribe meaning "people of the mountains"
1940 population & (rank): 550,310 (40)
1948 est. pop. & (rank): 655,000 (38)
Area, sq. mi. & (rank): 84,916 (10)
Governor: J. Bracken Lee (Rep., 1953)
Chief products: sugar, wool, minerals
Chief cities: SALT LAKE CITY, Ogden, Provo

Utah, first in gold mining, and high in copper, silver, and lead, was probably the last U. S. area to be explored fully. Its deep twisting caverns and weird rock formation, with the largest natural bridges in the nation, inaccessible in many parts, suggest a wealth of geologic and ancient cultural lore that has only recently been looked into. The state's crops, requiring extensive irrigation, are sugar beets, potatoes, hay, onions and wheat. There is an extensive livestock industry.

Brigham Young led the Mormons into the area in 1847. Six times in the next forty years, the area applied for statehood and was refused because of polygamy. In 1896, when polygamy was abandoned by the Mormon Church, Utah was admitted into the union.

Great Salt Lake, lying in the north central area, has long been a world wonder. It covers 1,500 square miles, is 4,200 feet above sea level, has no known outlet, and has a salt content about six times that of the ocean.

Utah offers some of the best hunting and fishing grounds in the West with duck, deer, elk and pheasant abounding. Winter sports are being developed.

Spanish explorers in 1540 were probably the first whites in the area.

VERMONT

Entered Union & (rank): Mar. 4, 1791 (14)
Motto: Freedom and Unity
Flower: Red Clover
Bird: Hermit Thrush
Song: "Song of Vermont"*
Nickname: Mountain
Origin of name: from the French meaning "green mountains"
1940 population & (rank): 359,231 (45)
1948 est. pop. & (rank): 374,000 (45)
Area, sq. mi. & (rank): 9,609 (42)
Governor: Ernest W. Gibson (Rep., 1951)
Chief products: dairy and quarry products
Chief cities: Burlington, Rutland, Barre, ... MONTPELIER

Vermont, the only New England state without a seacoast (and the last to be settled because of this), is a U. S. leader in the production of maple syrup and asbestos and sometimes the leader in marble and

granite. In ratio to population, it keeps more dairy cows than any other state. Vermont's soil is largely devoted to truck farming and fruit growing, its rugged area precluding extensive farming. This same quality, however, along with a bracing dry climate, makes the state popular as a summer resort and as a center of winter sports. Two-thirds of the total land area of the state is classified as forest land.

From 1777 to 1791, Vermont was an independent republic with all national perquisites and then was the first state after the original thirteen to join the Union. It was also the first state to forbid slavery. Vermont has been Republican since 1856; only Georgia on the Democratic side ties that record for consistency.

Samuel de Champlain saw the state for the first time in 1609.

VIRGINIA

Entered Union & (rank): June 25, 1788 (10)
Seceded from Union: Apr. 17, 1861
Re-entered Union: Jan. 27, 1870
Motto: *Sic Semper Tyrannis* (Thus ever to tyrants)
Flower: American Dogwood
Bird: Robin*
Song: "Carry Me Back to Old Virginny"
Nickname: Old Dominion
Origin of name: in honor of Elizabeth, the "Virgin Queen"
1940 population & (rank): 2,677,773 (19)
1948 est. pop. & (rank): 3,029,000 (16)
Area, sq. mi. & (rank): 40,815 (35)
Governor: William M. Tuck (Dem., 1950)
Chief products: tobacco, general agriculture, apples
Chief cities: RICHMOND, Norfolk, Roanoke

Virginia is bound up with American history. Jamestown, founded in 1607, was the first permanent English settlement in North America; slavery was introduced in the state in 1619; the Revolutionary and Civil War were both ended in this state, and Virginia supplied seven of the first twelve Presidents.

Agriculture and tobacco are Virginia's mainstays. Apples, cotton, wheat, oats, potatoes, barley and sweet potatoes are her crops. Richmond makes more cigarettes than any other city in the world. Virginia's hams are world famous. There is a substantial livestock industry in southwest Virginia. Industry, particularly in the textile lines, is developing rapidly in this state.

Norfolk, together with Portsmouth and Newport News, makes up the Port of Hampton Roads, one of the nation's busy port areas.

Monticello, home of Jefferson, Mount Vernon, home of Washington, and Arlington National Cemetery bring visitors to this Old Dominion state annually.

The explorations of Sir Walter Raleigh, in 1584, were responsible for the birth of this state, which at that time included the entire Atlantic coast north of the Spanish settlements.

WASHINGTON

Entered Union & (rank): Nov. 11, 1889 (42)
Motto: *Alki* (Chinook dialect) (By and by)
Flower: Rhododendron
Bird: Willow Goldfinch*
Song: "Washington Beloved"
Nickname: Evergreen; Chinook
Origin of name: from the first President of the U. S.
1940 population & (rank): 1,736,191 (30)
1948 est. pop. & (rank): 2,487,000 (22)
Area, sq. mi. & (rank): 68,192 (19)
Governor: Arthur B. Langlie (Rep., 1953)
Chief products: electricity, apples, wheat, lumber
Chief cities: Seattle, Spokane, Tacoma, ...
OLYMPIA

Washington annually leads the nation in lumber production. Its rugged surface is rich in stands of Douglas fir, yellow and white pine, spruce, larch and cedar. The state's other first is apples. Food and lumber products and a wide variety of goods flow from Washington factories.

Grand Coulee Dam, built on the Columbia River for power and irrigation, is the world's largest concrete dam and creates a reservoir 151 miles long. It also provides the source of electric power that makes this state the owner of more electric lights per capita than any other in the nation. The state pays the second highest unemployment insurance rates in the U. S., \$25 per week for 26 weeks. The Hanford Engineer Works, north of Pasco, was set up as the world's first full-scale plant for the making of atom bombs. The highest local average annual rainfall of 150.73 inches was set by Wynoochee Oxbow.

Bruno Heceta landed in Washington in 1775.

WEST VIRGINIA

Entered Union & (rank): June 20, 1863 (35)
Motto: *Montani Semper Liberi* (Mountaineers are always freemen)
Flower: Rhododendron
Bird: Tufted Titmouse*
Song: "West Virginia Hills"*
Nickname: Mountain; Panhandle
Origin of name: Same as Virginia
1940 population & (rank): 1,901,974 (25)
1948 est. pop. & (rank): 1,915,000 (31)
Area, sq. mi. & (rank): 24,181 (40)
Governor: Okey L. Patteson (Dem., 1953)
Chief product: coal
Chief cities: Huntington, CHARLESTON, Wheeling

Mountainous West Virginia is the coal mining leader of the nation. Geologists believe that if all other U. S. coal mines shut down, West Virginia alone could supply the country for 250 years with its deposits of bituminous (soft) coal. The state also ranks high in natural gas, oil, quarry products and hardwood lumber. Wheat, corn, oats, hay, tobacco and fruit are the leading crops.

West Virginia was created when its residents refused to secede from the union and

severed itself from Virginia during the Civil War era. Like many mountain states, West Virginia has an equable climate without extremes. White Sulphur Springs, in Greenbrier County, is a famous health resort. Mountain streams give the state one of the highest U. S. water power potentials.

In 1671, Captain Thomas Batts and a party from eastern Virginia probably were the first whites to see the area.

WISCONSIN

Entered Union & (rank): May 29, 1848 (30)
Motto: Forward
Flower: Violet*
Bird: Robin*
Song: "Hail, Wisconsin"*
Nickname: Badger
Origin of name: from the French corruption of an Indian word meaning "gathering of the waters"
1940 population & (rank): 3,137,587 (13)
1948 est. pop. & (rank): 3,309,000 (13)
Area, sq. mi. & (rank): 56,154 (25)
Governor: Oscar Rennebohm (Rep., 1951)
Chief products: dairy products, general agriculture
Chief cities: Milwaukee, MADISON, Racine

Wisconsin is the first dairying state in the nation and leads in such items as number of dairy cattle, and production of cheese and butter and milk products. Until some forty years ago, when its forests were exhausted, Wisconsin was a leader in lumbering. It has since turned its attention to agriculture and manufacturing. The making of paper, autos, beer, machinery and furniture are its main factory interests. Cranberries, hemp, oats, rye and tobacco are its secondary agricultural pursuits. Its benign climate makes crop failure almost unheard of.

Wisconsin was the first state to have a workmen's compensation law and, in 1934, a state unemployment insurance law. Madison has the only U. S. forest products laboratory, a reminder of its past interests. Its many lakes make it a favorite summer resort state.

Jean Nicolet, French explorer, seeking a northwest passage in 1634, was the first to see the state.

WYOMING

Entered Union & (rank): July 10, 1890 (44)
Motto: *Cedant Armæ Togæ* (Let arms yield to the gown)
Flower: Indian Paintbrush
Bird: Meadow Lark
Song: "Wyoming, the Wyoming State Song"*
Nickname: Equality
Origin of name: from the Indian word perpetuating a Pennsylvania valley
1940 population & (rank): 250,742 (47)
1948 est. pop. & (rank): 275,000 (47)
Area, sq. mi. & (rank): 97,914 (8)
Governor: A. G. Crane (Rep., 1951)
Chief products: wool, minerals, oil
Chief cities: CHEYENNE, Casper, Laramie

Wealthy in wool, cattle, oil and coal, Wyoming was first in U. S. history to insure woman's place in politics. In 1869, it gave women the vote and Mrs. Nellie Tayloe Ross, who held office in 1925-27, was the first U. S. woman governor.

Second in mean elevation to Colorado, Wyoming has many lures for the tourist trade, notably Yellowstone National Park. Cheyenne is famous for its annual "Fron-

tier Days" celebration which brings in visitors from everywhere. One of the world's largest subbituminous coal fields lies near Sheridan. Big game hunting is good in many parts of the state.

Trappers in 1812 were probably the first white men to settle this state, although John Colter, a member of the Lewis and Clark expedition, reached the northwest corner in 1807.

Self-governing U. S. Territories

ALASKA

Flower: Forget-me-not*

Song: "Alaska, My Alaska"*

1940 population: 72,524

1945 est. pop.: 134,000

Area, sq. mi.: 586,400 (incl. the Aleutians)

Governor: Ernest Gruening

Chief products: fish, furs, minerals

Chief cities: JUNEAU, Ketchikan, Anchorage

Alaska, the biggest, coldest and wildest of U. S. possessions (including the Aleutians from longitude 167° east of Greenwich) was called "Seward's Folly" in 1867, when that Secretary of State arranged for its purchase from Russia for \$7,200,000. Since then Alaska has paid for itself scores of times.

Canned salmon is Alaska's biggest product. It mines gold, supplies most of U. S. tin and also turns out copper, platinum, coal, oil, gypsum, limestone and marble. The Pribilof Islands, in the Bering Sea, are world famous as the breeding ground of the Alaska fur seal, which is under careful government control. Beaver, muskrat, otter, mink and other furs also abound.

Mt. McKinley, in the south central part, is 20,300 feet high, the tallest peak in North America. With its wild interior, still partly unexplored, this territory is a hunter's paradise. With only one person for every eight square miles, Alaska is by far the most thinly settled of U. S. lands. Sitka was its capital until 1906. Alaska became a territory of the U. S. in 1912.

Alaska has magnificent glaciers and active volcanoes. Winter temperatures in the interior have been known to register 60° below zero. In June, 1912, the whole top blew off Mt. Katmai in the Aleutian range. Of Alaska's 1945 estimated population of 134,000, 40 percent were composed of Eskimos, Aleuts and Indians with the remaining 60 percent being whites.

World War II brought to this territory a tremendous economic and physical expansion. In addition to the military personnel, thousands of construction workers were brought in to help build the chain of airports, naval bases, barracks, etc. Permanent improvements were effected in the form of additional highways, radio range stations and airports.

Vitus Bering, a Dane working for the Russians, and Alexei Chirikov discovered Alaska in 1741.

HAWAII

Motto: *Ua Mau Ke Ea O Ka Aina I Ka Pono*
(The growth of the land is perpetuated by righteousness)

Flower: Hibiscus

Song: "Hawaii Pono I"

Nickname: Paradise of the Pacific

1940 population: 423,330

1947 est. pop.: 525,477

Area, sq. mi.: 6,454 (incl. outlying islands)

Governor: Ingram M. Stainback

Chief products: pineapples, cane sugar, tourist trade

Capital: HONOLULU (on Oahu)

Hawaii, a volcanic-coral Pacific island group, and 2,394 miles southwest of San Francisco, grows 90 percent of the world's pineapple. The group is a 390-mile chain of islets and 8 main islands—Hawaii, Kahoolawe, Maui, Lanai, Molokai, Oahu, Kauai and Niihau. Kure or Ocean Island and Palmyra are included in the group.

Hawaii's temperature is mild and the soil is fertile for tropical fruits and vegetables. Cane sugar is its chief product and it also grows coffee, rice, cotton, bananas, nuts and potatoes. Some livestock is raised. In normal times, the tourist business is Hawaii's third biggest source of income. At least 86 percent of the islands' population, although racially heterogeneous, are native born.

Hawaii's highest peak, Mauna Kea, rises to 13,784 feet and is, in a sense, the world's highest mountain since it springs from an ocean floor 18,000 feet below sea level. Kilauea, on Hawaii, is one of the world's most active volcanos. The islands have no snakes and their only native mammal is a small bat of which there are hundreds of species. It won its sharp fame on Dec. 7, 1941, when the Japanese attacked Pearl Harbor, near Honolulu.

Hawaii's Governor is appointed by the President to a four-year term and there is a locally-elected two-house legislature. Hawaii's delegate to the House of Representatives in Washington has floor privileges but no vote. Legislation is now pending in Congress for the admission of the territory as the 49th state.

Hawaii was discovered in 1778 by Captain James Cook, an Englishman, who named them the Sandwich Islands. It was ruled by native monarchs until 1898 when it ceded itself to the U. S. It became a territory in 1900.

Non Self-governing U. S. Territories

AMERICAN SAMOA

American Samoa, a group of seven main volcanic or coral islands in the South Pacific, comprises the island of Tutuila and all the other islands of the Samoan Group east of longitude 171° west of Greenwich, including Aunu'u, Manua (Tau, Olosega and Ofu) and Swains Islands and Rose Atoll.

On Dec. 2, 1899, in a conference held in Washington, the U. S., Germany and Great Britain decided on the division of the Samoan Islands that held until World War I, after which New Zealand took possession of the German-mandated islands. In the 1900s, the high chiefs of the American group ceded possession to the U. S. and Congress accepted jurisdiction about twenty-five years later.

The total area of the group is seventy-six square miles and the 1940 population was 12,908. The principal products are copra and mats woven from local grass and leaves.

BAKER, HOWLAND AND JARVIS

These Pacific islands were not to play a role in the extraterritorial plans of the U. S. until May 13, 1936, when the U. S. perfected its claim. President F. D. Roosevelt, at that time, placed them under the control of and jurisdiction by the Secretary of the Interior for purposes of administration.

Baker Island is a rectangular atoll with an area of approximately one square mile and an elevation of twenty feet. It is about 1,880 miles from Hawaii.

Howland Island, a few miles to the north, is approximately one and a half miles long and half a mile wide and rises to an elevation of eighteen feet. Both these islands are near the crossing of the Equator and the International Date line.

Jarvis Island is several hundred miles to the east and is approximately two miles long by one and a half miles wide. It is slightly south of the Equator.

CANAL ZONE

1940 population: 51,827

1945 est. pop.: 44,688

Area, sq. mi.: 553

Fifty miles long and ten miles wide, with the Panama Canal traversing its middle, the Canal Zone is a protective belt of U. S. territory guarding the vital water link between the Atlantic and the Pacific Oceans.

The Canal Zone was granted to the U. S. by Panamá on Feb. 26, 1904, for \$10,000,000 outright and an annual payment of \$250,000, which was later increased to \$430,000. The canal was opened ten years later.

The history of the Canal goes back to 1534 when King Charles V of Spain ordered a survey made. In 1879 the French obtained canal rights but gave up after twenty-five years of unsuccessful work. The U. S. then bought the French rights for \$40,000,000 and set to work. The canal today measures 40.27 miles from shore line to shore line

and 50.72 miles from deep water to deep water (Caribbean to Pacific). The railroad, running from Colón to Panamá City, covers 47.64 miles.

The locks making the climb from the Caribbean to the Pacific are Gatún Locks, Pedro Miguel Locks and Miraflores Locks, which have a total of six steps or levels. The locks are 1,000 feet long and 110 feet wide. Only U. S. Navy craft pass through free.

No private individuals are permitted to own land in the Canal Zone and the area is administered by a Governor appointed by the President of the U. S.

Work is now being done to permit the handling of vessels now barred because of their size.

CANTON AND ENDERBURY

Canton and Enderbury Islands, the largest of the Phoenix group, are jointly owned and supervised by the U. S. and Great Britain after an agreement signed on Apr. 6, 1939. Canton is triangular in shape and the largest of the eight islands of this group. It lies approximately 1,600 miles southwest of Hawaii in the Pacific and was discovered at the turn of the eighteenth century by U. S. whalers. It was surveyed by Commander R. W. Meade who named it after a whaler ship. It had, in 1940, a population of forty. Enderbury is rectangular in shape and is 2.7 miles long by one mile wide. It had, in 1940, a population of four and it lies about thirty-two miles southeast of Canton.

JOHNSTON ISLAND

This island was originally discovered by Captain Charles James Johnston of *H.M.S. Cornwallis* on Dec. 14, 1807. On July 27, 1858, it was claimed by Hawaii and became a possession of the U. S. The island is about 600 miles southwest of Hawaii and about one and a half miles long by half a mile wide.

KINGMAN REEF

This reef was discovered by Captain W. E. Kingman in Nov., 1853, and is the smallest land of U. S. sovereignty. It is 150 feet long by 120 feet wide at high tide. At low tide, two other islets of this atoll appear. It is approximately 1,000 miles south of Hawaii.

MIDWAY ISLANDS

The Midway group, lying about 1,200 miles northwest of Hawaii, was discovered by Captain N. C. Brooks of the Hawaiian bark *Gambia* on July 5, 1859, in the name of the U. S. It was formally declared a U. S. possession in 1867, and in 1903 Theodore Roosevelt made it a naval reservation. Sand and Eastern Islands, with 850 acres and 328 acres respectively, are its largest individual islands. In 1935 it became a regular stopover for commercial transpacific flights. During the past war it was the scene of the first decisive defeat suffered by the Japanese. The total group comprises an area of twenty-eight square miles.

PUERTO RICO

Song: "La Borinqueña"

1940 population: 1,869,255

1946 est. pop.: 2,101,698

Area, sq. mi.: 3,435

Governor: Luis Muñoz Marín

Chief products: cane sugar, rum, citrus fruits

Capital: SAN JUAN

Puerto Rico, ninety-five miles long and at the northeast head of the Caribbean Sea, is a big cane sugar and rum producer and one of the most densely populated sections in the world. Other crops are cigars, citrus fruits, pineapples, rope and coffee.

The island was seized by the U. S. in 1898 in the Spanish-American War. It is administered by a Governor, who, as a result of a bill signed by President Truman on Aug. 5, 1947, is elected by popular vote, and a locally-elected Congress. There is also a Resident Commissioner in Washington with a voice in the House of Representatives but no vote.

Columbus discovered the island and Ponce de León conquered it for Spain in 1509.

WAKE ISLAND

Wake, lying about halfway between Midway and Guam, consists of the three islets of Wilkes, Peale and Wake. They were discovered by the British in 1796 and annexed by the U. S. in 1898. The entire area comprises four square miles. In 1938, Pan American Airways established a seaplane base

and it has been used as a commercial base since then. On Dec. 8, 1941, it was attacked by the Japanese, who finally took possession on Dec. 23. It was surrendered by the Japanese on Sept. 4, 1945.

VIRGIN ISLANDS

1940 population: St. Croix, 12,902

St. Thomas, 11,265

St. John, 722

Area, sq. mi.: St. Croix, 82

St. Thomas, 32

St. John, 19

Governor: William H. Hastie

Chief products: rum, tourists

Capital: CHARLOTTE AMALIE (on St. Thomas)

Chief cities: Christiansted and Frederiksted (on St. Croix); Cruz Bay (on St. John)

The Virgin Islands, lying east of Puerto Rico, are notable for making rum and entertaining tourists. They consist of about fifty islets and three main islands.

About 70 percent of the population is Negro and there is limited farming, fishing and cattle raising. Vegetables, citrus fruits and coconuts are also raised. Virgin Islanders have U. S. citizenship and are ruled by a Governor appointed by the President.

The Danes took over the islands in 1671 and the U. S. bought them from Denmark for \$25,000,000 in 1917.

Columbus discovered the group in 1493 and named them for St. Ursula and the Eleven Thousand Virgins.

U. S. Trusteeships

On April 2, 1947, the 134th meeting of the Security Council of the United Nations adopted and set up the Strategic Trust Territory of the Pacific Islands and assigned the Carolines, Marianas and Marshalls to the U. S. Congress approved the measure on July 18, 1947. These islands had been originally purchased by Germany from Spain in 1899 and mandated to the Japanese after World War I.

The entire group comprises more than 1,400 islands but the total land area is only 846 square miles, many of the islands being tiny coral reefs. The Chamorros and Kanakas are the main racial groups, the former being less numerous but more advanced in living habits.

CAROLINES

The Carolines are divided into four administrative districts, Palau, Yap, Truk and Ponape, and the seat of administration is at Palau, whose chief island is Peleliu. Palau is in the western section and Truk in the eastern section of this archipelago. The islands are composed chiefly of volcanic rock and their peaks rise to 2,000 or 3,000 feet.

MARIANAS

The Marianas were discovered by Magellan in 1521 and received their name in honor of Maria Anna of Austria in 1668. The main islands comprising this group are Saipan, Rota, Tinian, Iwo Jima, Asunción and GUAM. GUAM is the largest island of this group with an area of 206 square miles and is exclusive of the U. S. Trusteeship. It was acquired in the Spanish-American War by

the U. S. and placed under Navy Department administration. The people of Guam are U. S. nationals but not citizens and their chief produce is copra and coconut oil. For local consumption, the Guamians grow bananas, pineapple, corn, pears and many fruits. Agaña is its capital but was virtually wiped out in the fighting of 1944.

MARSHALLS

The Marshall Islands were the seat of the U. S. experiments with the atomic bomb. Its main islands are Jaluit, the seat of administration, Elizabeth, Jabwat, Kwajalein, Bikini and Eniwetok. The Marshalls are the easternmost of the U. S. Trusteeships and are, opposed to the others, low islands of coral reef type and rise only a few feet above sea level. The chief crops are coco-nut, copra, tortoise shells and fruits.

THE EXECUTIVE DEPARTMENTS

By Arthur M. Schlesinger, Jr.

Adapted from *Congressional Directory*, and *U. S. Government Manual*.

STATE. The Secretary of State has the principal responsibility, under the President, for the determination of the policy of the government in relation to international problems. He is charged with the conduct of negotiations pertaining to the protection of American rights and interests throughout the world, and the promotion of beneficial intercourse between the United States and other countries. He also performs certain domestic duties, such as having custody of the seal of the United States and publishing the laws enacted by Congress.

A Department of Foreign Affairs was established in 1781 and was reconstituted July 27, 1789, following adoption of the Constitution. The name was changed Sept. 15, 1789, to the Department of State.

TREASURY. The Secretary of the Treasury is charged by law with the management of the national finances. He superintends the collection of the revenue; grants warrants for money drawn from the Treasury in pursuance of appropriations made by law, and for the payment of moneys into the Treasury; directs the forms of keeping and rendering public accounts; prepares plans for the improvement of the revenue and for the support of the public credit; and submits a report annually to Congress on the condition of the public finances, and the results of activities under his supervision, which include, among others, the coinage and printing of money, and the administration of the Coast Guard, Narcotics and Secret Services.

The Department of the Treasury was created Sept. 2, 1789.

DEFENSE. The Secretary of Defense is responsible for supporting and defending the Constitution against all enemies, either foreign or domestic, and maintaining, by timely and effective military action, the security of the United States and its possessions and areas vital to its interest. He is charged with advancing the national policies and interests of the United States, and with safeguarding internal security as directed by higher authority. For these purposes, he may conduct integrated military operations on the land, on the sea, and in the air.

The Department of National Defense was created July 25, 1947, and replaced the Departments of War and of the Navy. Subordinate to the Secretary of Defense are the Secretaries of the Army, of the Navy, and of the Air Force. Although these three Secretaries do not have Cabinet rank, they have the right of direct access to the President.

JUSTICE. The Attorney General is the chief law officer of the Federal Government. He represents the United States in legal matters generally and gives advice and opinions when requested by the President or by the heads of the executive departments. He appears in the Supreme Court in cases of exceptional importance, exercises general superintendence over United States district attorneys and marshals in the various judicial districts, and provides special counsel for the United States when the character of the interests involved requires such action. The Federal Bureau of Investigation and the Bureau of Prisons are under his direction.

The office of Attorney General was created Sept. 24, 1789. Although he was one of the original Cabinet members, he was not head of a department until June 22, 1870, when the Department of Justice was created.

POST OFFICE. The Postmaster General is executive head of the Postal Service. Subject to approval of the President, he makes postal treaties with foreign governments.

The office of Postmaster General and a temporary post office system were created Sept. 22, 1789. The first detailed provisions for a department were made Feb. 20, 1792, and later legislation developed the Postal System. The Postmaster General did not become a Cabinet member until 1829, and the department did not receive executive status until June 8, 1872.

INTERIOR. The Secretary of the Interior has the primary task of developing and conserving the natural resources of the United States and its territories for this and future generations. He is charged with the supervision of public business relating to such offices as the General Land Office, Bureau of Reclamation, Geological Survey, Office of Indian Affairs, National Park Service, Bureau of Mines, Division of Territories and Island Possessions, etc.

The Department of the Interior was created Mar. 3, 1849.

AGRICULTURE. The Secretary of Agriculture is charged with acquiring and diffusing among the people of the United States useful information on subjects connected with agriculture in the most general and comprehensive sense of the term. For that purpose he conducts a comprehensive research and educational program. He is also required to administer many other Federal laws which relate to marketing and distribution of agricultural products; the regulation of interstate commerce in food, fiber and related products; the protection

and management of the national forests, farm credit, agricultural adjustment, conservation and land use, farm tenancy, and rural rehabilitation and electrification.

The Department of Agriculture was created May 15, 1862, and administered by a Commissioner of Agriculture until Feb. 9, 1889, when it was made an executive department and the office of Secretary was created.

COMMERCE. The Secretary of Commerce directs such activities as population, agriculture and other censuses; collection, analysis and dissemination of commercial statistics; promotion of foreign and domestic commerce; coastal and geodetic surveys; establishment of commodity weights, measures, and standards; supervision of the issuance of patents and the registration of trade marks; maintenance of aids to air navigation; development of inland waterway transportation.

On Mar. 4, 1913, all labor activities were transferred out of the Department of Commerce and Labor, and it was renamed the Department of Commerce.

LABOR. The Secretary of Labor is charged with the duty of fostering, promoting and developing the welfare of the wage earners of the United States, improving their working conditions, and advancing their opportunities for profitable employment. He has the power to act as mediator and to appoint commissioners of conciliation in labor disputes whenever in his judgment the interests of industrial peace may require it to be done. He directs the collection and collation of statistics concerning conditions of labor; the promulgation and enforcement of certain maximum hour, minimum wage, child labor, safety and health stipulations in connection with Government supply contracts; the investigation of matters pertaining to children.

A Bureau of Labor was created in 1884 under the Department of the Interior, and it later became an independent department without executive rank. It was returned to bureau status in the Department of Commerce and Labor, but on Mar. 4, 1913, it became an independent executive department under its present name.

Earlier Departments

WAR. The War Department was created Aug. 7, 1789, to succeed a similar department established before the adoption of the Constitution. Its activities were placed under the Department of National Defense on July 25, 1947.

NAVY. On April 7, 1789, the conduct of naval affairs was placed under the War De-

partment, but on April 30, 1798, the Department of the Navy was created. Its activities were placed under the Department of National Defense on July 25, 1947.

COMMERCE AND LABOR. The Department of Commerce and Labor was created Feb. 14, 1903, and divided Mar. 4, 1913, into two separate departments.

Presidential Succession

Under the Constitution, the Vice President is next in line for the Presidency; and, according to the Presidential Succession Act of 1886, the Vice President was to be followed by the Secretary of State, Secretary of the Treasury, Secretary of War, Attorney General, Postmaster General, Secretary of the Navy, and Secretary of the Interior in that order, provided they were constitutionally eligible. The Secretaries of Agriculture, Commerce and Labor were not included since their posts had not yet been created.

On July 18, 1947, President Truman

signed a bill making the Speaker of the House next in line after the Vice President, to be followed by the Senate President pro tempore provided both are constitutionally eligible. They are followed by the cabinet members in the same order as provided by the Act of 1886, with the Secretaries of Agriculture, Commerce and Labor added in that order after the Secretary of the Interior. Under the National Security Act of 1947, signed July 26, 1947, the new Secretary of Defense, replacing the Secretaries of War and the Navy, is third in the succession line in the cabinet.

Committee on Reorganization of the Executive Branch

On July 16, 1947, President Truman selected ex-President Herbert Hoover to head a bipartisan commission to study the operation of the Federal government and to recommend simplifications. Hoover formally accepted the chairmanship of the 12-man commission on Sept. 29, 1947, and

since that time, more than 250 experts in various fields have volunteered their services as advisers to the paid staff making the survey. According to Hoover, recommendations for reorganization of the Federal executive branch will be made after the 1948 election.

The Cabinets

Although the Constitution made no provision for a President's advisory group, the heads of the three executive departments (State, Treasury and War) and the Attorney General were organized by Washington into such a group; and by about 1793, the name "Cabinet" was applied to it. With the exception of the Attorney General up to 1870 and the Postmaster General from 1829-72, Cabinet members have been heads of executive departments, although other government officials may be called to sit in whenever necessary.

A Cabinet member is appointed by the President, subject to the confirmation of the Senate; and as his term is not fixed, he may be replaced at any time by the President. At a change in Administration, it is customary for him to tender his resignation, but he remains in office until a successor is appointed.

The table of Cabinet members lists only those members who actually served after being duly commissioned. It does not include ad-interim appointments or cases where the appointee declined the office after appointment.

The dates shown are those of appointment. "Contd" indicates that the term continued from the previous Administration for a substantial amount of time. Those cases where the term continued for only a few days, until a new appointment could be made, are not indicated.

The Postmaster General did not become a Cabinet member until 1829. Earlier Postmasters General were: Samuel Osgood (1789), Timothy Pickering (1791), Joseph Habersham (1795), Gideon Granger (1801), Return J. Meigs, Jr. (1814) and John McLean (1823).

1789 to 1948

WASHINGTON

Secretary of State

Thomas Jefferson 1789
Edmund Randolph 1794
Timothy Pickering 1795

Secretary of the Treasury
Alexander Hamilton 1789
Oliver Wolcott, Jr. 1795

Secretary of War

Henry Knox 1789
Timothy Pickering 1795
James McHenry 1796

Attorney-General

Edmund Randolph 1789
William Bradford 1794
Charles Lee 1795

J. ADAMS

Secretary of State

Timothy Pickering Contd
John Marshall 1800

Secretary of the Treasury
Oliver Wolcott, Jr. Contd
Samuel Dexter 1801

Secretary of War

James McHenry Contd
Samuel Dexter 1800

Attorney-General

Charles Lee Contd

Secretary of the Navy

Benjamin Stoddert 1798

JEFFERSON

Secretary of State

James Madison 1801

Secretary of the Treasury
Samuel Dexter Contd
Albert Gallatin 1801

Secretary of War

Henry Dearborn 1801

Attorney-General

Levi Lincoln 1801
Robert Smith 1805
John Breckinridge 1805
Caesar A. Rodney 1807

Secretary of the Navy

Benjamin Stoddert Contd
Robert Smith 1801

MADISON

Secretary of State

Robert Smith 1809
James Monroe 1811

Secretary of the Treasury

Albert Gallatin Contd
George W. Campbell 1814
Alexander J. Dallas 1814
William H. Crawford 1816

Secretary of War

William Eustis 1809
John Armstrong 1813
James Monroe 1814
William H. Crawford 1815

Attorney-General

Caesar A. Rodney Contd
William Plinckney 1811
Richard Rush 1814

Secretary of the Navy

Paul Hamilton 1809
William Jones 1813
B. W. Crowninshield 1814

MONROE

Secretary of State

John Quincy Adams 1817

Secretary of the Treasury

William H. Crawford Contd

Secretary of War

John C. Calhoun 1817

Attorney-General

Richard Rush Contd
William Wirt 1817

Secretary of the Navy

B. W. Crowninshield Contd
Smith Thompson 1818
Samuel L. Southard 1823

J. Q. ADAMS

Secretary of State

Henry Clay 1825

Secretary of the Treasury

Richard Rush 1825

Secretary of War

James Barbour 1825
Peter B. Porter 1828

Attorney-General

William Wirt Contd

Secretary of the Navy

Samuel L. Southard Contd

JACKSON

Secretary of State

Martin Van Buren 1829
Edward Livingston 1831
Louis McLane 1833
John Forsyth 1834

Secretary of the Treasury

Samuel D. Ingham 1829
Louis McLane 1831
William J. Duane 1833
Roger B. Taney 1833
Levi Woodbury 1834

Secretary of War

John H. Eaton 1829
Lewis Cass 1831

Attorney-General

John M. Berrien 1829
Roger B. Taney 1831
Benjamin F. Butler 1833

Postmaster-General

William T. Barry 1829
Amos Kendall 1835

Secretary of the Navy

John Branch 1829
Levi Woodbury 1831
Mahlon Dickerson 1834

VAN BUREN

Secretary of State

John Forsyth Contd

Secretary of the Treasury

Levi Woodbury Contd

Secretary of War

Joel R. Poinsett 1837

Attorney-General

Benjamin F. Butler Contd
Felix Grundy 1838
Henry D. Gilpin 1840

Postmaster-General

Amos Kendall Contd
John M. Niles 1840

Secretary of the Navy

Mahlon Dickerson Contd
James K. Paulding 1838

W. HARRISON

Secretary of State

Daniel Webster 1841

Secretary of the Treasury

Thomas Ewing 1841

Secretary of War

John Bell 1841

Attorney-General

John J. Crittenden 1841

Postmaster-General

Francis Granger 1841

Secretary of the Navy

George E. Badger 1841

TYLER

Secretary of State

Daniel Webster Contd
Abel P. Upshur 1843
John C. Calhoun 1844

Secretary of the Treasury

Thomas Ewing Contd
Walter Forward 1841
John C. Spencer 1843
George M. Bibb 1844

Secretary of War

John Bell Contd
John C. Spencer 1841
James M. Porter 1843
William Wilkins 1844

Attorney-General

John J. Crittenden Contd
Hugh S. Legare 1841
John Nelson 1843

Postmaster-General

Francis Granger Contd
Charles A. Wickliffe 1841

Secretary of the Navy

George E. Badger Contd
Abel P. Upshur 1841
David Henshaw 1843

Thomas W. Gilmer .. 1844
John Y. Mason 1844

POLK

Secretary of State
James Buchanan 1845
Secretary of the Treasury
Robert J. Walker 1845
Secretary of War
William L. Marcy 1845
Attorney-General
John Y. Mason 1845
Nathan Clifford 1846
Isaac Toucey 1848
Postmaster-General
Cave Johnson 1845
Secretary of the Navy
George Bancroft 1845
John Y. Mason 1846

TAYLOR

Secretary of State
John M. Clayton 1849
Secretary of the Treasury
William M. Meredith .. 1849
Secretary of War
George W. Crawford .. 1849
Attorney-General
Reverdy Johnson 1849
Postmaster-General
Jacob Collamer 1849
Secretary of the Navy
William B. Preston .. 1849
Secretary of the Interior
Thomas Ewing 1849

FILLMORE

Secretary of State
Daniel Webster 1850
Edward Everett 1852
Secretary of the Treasury
Thomas Corwin 1850
Secretary of War
Charles M. Conrad .. 1850
Attorney-General
John J. Crittenden .. 1850
Postmaster-General
Nathan K. Hall 1850
Samuel D. Hubbard .. 1852
Secretary of the Navy
William A. Graham .. 1850
John P. Kennedy 1852
Secretary of the Interior
Thos. M. T. McKennon 1850
Alex. H. H. Stuart .. 1850

PIERCE

Secretary of State
William L. Marcy 1853
Secretary of the Treasury
James Guthrie 1853
Secretary of War
Jefferson Davis 1853
Attorney-General
Caleb Cushing 1853
Postmaster-General
James Campbell 1853
Secretary of the Navy
James C. Dobbin 1853

Secretary of the Interior
Robert McClelland ... 1853

BUCHANAN

Secretary of State
Lewis Cass 1857
Jeremiah S. Black ... 1860
Secretary of the Treasury
Howell Cobb 1857
Philip F. Thomas 1860
John A. Dix 1861
Secretary of War
John B. Floyd 1857
Joseph Holt 1861
Attorney-General
Jeremiah S. Black ... 1857
Edwin M. Stanton ... 1860
Postmaster-General
Aaron V. Brown 1857
Joseph Holt 1859
Horatio King 1861
Secretary of the Navy
Isaac Toucey 1857
Secretary of the Interior
Jacob Thompson 1857

LINCOLN

Secretary of State
William H. Seward .. 1861
Secretary of the Treasury
Salmon P. Chase 1861
William P. Fessenden 1864
Hugh McCulloch 1865
Secretary of War
Simon Cameron 1861
Edwin M. Stanton ... 1862
Attorney-General
Edward Bates 1861
James Speed 1864
Postmaster-General
Montgomery Blair ... 1861
William Dennison ... 1864
Secretary of the Navy
Gideon Welles 1861
Secretary of the Interior
Caleb B. Smith 1861
John P. Usher 1863

JOHNSON

Secretary of State
William H. Seward ..Contd
Secretary of the Treasury
Hugh McCullochContd
Secretary of War
Edwin M. Stanton ...Contd
John M. Schofield ... 1868
Attorney-General
James SpeedContd
Henry Stanbery 1866
William M. Everts .. 1868
Postmaster-General
William Dennison ...Contd
Alexander W. Randall 1866
Secretary of the Navy
Gideon WellesContd
Secretary of the Interior
John P. UsherContd
James Harlan 1865
Orville H. Browning .. 1866

GRANT

Secretary of State
Elihu B. Washburne .. 1869
Hamilton Fish 1869

Secretary of the Treasury
George S. Boutwell ... 1869
William A. Richardson 1873
Benjamin H. Bristow .. 1874
Lot M. Morrill 1876
Secretary of War
John A. Rawlins 1869
William T. Sherman .. 1869
William W. Belknap .. 1869
Alphonso Taft 1876
James D. Cameron 1876
Attorney-General
Ebenezer R. Hoar 1869
Amos T. Akerman 1870
George H. Williams .. 1871
Edwards Pierpont 1875
Alphonso Taft 1876
Postmaster-General
John A. J. Creswell .. 1869
James W. Marshall ... 1874
Marshall Jewell 1874
James N. Tyner 1876
Secretary of the Navy
Adolph E. Borie 1869
George M. Robeson .. 1869
Secretary of the Interior
Jacob D. Cox 1869
Columbus Delano 1870
Zachariah Chandler .. 1875

HAYES

Secretary of State
William M. Everts .. 1877
Secretary of the Treasury
John Sherman 1877
Secretary of War
George W. McGrary ... 1877
Alexander Ramsey ... 1879
Attorney-General
Charles Devens 1877
Postmaster-General
David M. Key 1877
Horace Maynard 1880
Secretary of the Navy
Richard W. Thompson 1877
Nathan Goff, Jr. 1881
Secretary of the Interior
Carl Schurz 1877

GARFIELD

Secretary of State
James G. Blaine 1881
Secretary of the Treasury
William Windom 1881
Secretary of War
Robert T. Lincoln ... 1881
Attorney-General
Wayne MacVeach 1881
Postmaster-General
Thomas L. James 1881
Secretary of the Navy
William H. Hunt 1881
Secretary of the Interior
Samuel J. Kirkwood .. 1881

ARTHUR

Secretary of State
James G. BlaineContd
F. T. Frelinghuysen .. 1881
Secretary of the Treasury
William WindomContd
Charles J. Folger 1881
Walter Q. Gresham ... 1884
Hugh McCulloch 1884

Secretary of War
Robert T. Lincoln ...Contd
Attorney-General
Wayne MacVeachContd
Benjamin H. Brewster 1881
Postmaster-General
Thomas L. JamesContd
Timothy O. Howe 1881
Walter Q. Gresham ... 1883
Frank Hatton 1884
Secretary of the Navy
William H. HuntContd
William E. Chandler .. 1882
Secretary of the Interior
Samuel J. Kirkwood ..Contd
Henry M. Teller 1882

CLEVELAND

Secretary of State
Thomas F. Bayard ... 1885
Secretary of the Treasury
Daniel Manning 1885
Charles S. Fairchild .. 1887
Secretary of War
William C. Endicott .. 1885
Attorney-General
Augustus H. Garland .. 1885
Postmaster-General
William F. Vilas 1885
Don M. Dickinson 1888
Secretary of the Navy
William C. Whitney .. 1885
Secretary of the Interior
Lucius Q. C. Lamar .. 1885
William F. Vilas 1888
Secretary of Agriculture
Norman J. Colman ... 1889

HARRISON

Secretary of State
James G. Blaine 1889
John W. Foster 1892
Secretary of the Treasury
William Windom 1889
Charles Foster 1891
Secretary of War
Redfield Proctor 1889
Stephen B. Elkins 1891
Attorney-General
William H. Miller 1889
Postmaster-General
John Wanamaker 1889
Secretary of the Navy
Benjamin F. Tracy ... 1889
Secretary of the Interior
John W. Noble 1889
Secretary of Agriculture
Jeremiah M. Rusk 1889

CLEVELAND

Secretary of State
Walter Q. Gresham ... 1893
Richard Olney 1893
Secretary of the Treasury
John G. Carlisle 1893
Secretary of War
Daniel S. Lamont 1893
Attorney-General
Richard Olney 1893
Judson Harmon 1895

Postmaster-General
Wilson S. Blissell ... 1893
William L. Wilson ... 1895

Secretary of the Navy
Hilary A. Herbert ... 1893

Secretary of the Interior
Hoke Smith ... 1893
David R. Francis ... 1896

Secretary of Agriculture
Julius Sterling Morton 1893

MCKINLEY

Secretary of State
John Sherman ... 1897
William R. Day ... 1898
John Hay ... 1898

Secretary of the Treasury
Lyman J. Gage ... 1897

Secretary of War
Russell A. Alger ... 1897
Elihu Root ... 1899

Attorney-General
Joseph McKenna ... 1897
John W. Griggs ... 1898
Philander C. Knox ... 1901

Postmaster-General
James A. Gary ... 1897
Charles E. Smith ... 1898

Secretary of the Navy
John D. Long ... 1897

Secretary of the Interior
Cornelius N. Bliss ... 1897
Ethan A. Hitchcock ... 1898

Secretary of Agriculture
James Wilson ... 1897

T. ROOSEVELT

Secretary of State
John Hay ... Contd
Elihu Root ... 1905
Robert Bacon ... 1909

Secretary of the Treasury
Lyman J. Gage ... Contd
Leslie M. Shaw ... 1902
George B. Cortelyou ... 1907

Secretary of War
Elihu Root ... Contd
William H. Taft ... 1904
Luke E. Wright ... 1908

Attorney-General
Philander C. Knox ... Contd
William H. Moody ... 1904
Charles J. Bonaparte ... 1906

Postmaster-General
Charles E. Smith ... Contd
Henry C. Payne ... 1902
Robert J. Wynne ... 1904
George B. Cortelyou ... 1905
George von L. Meyer ... 1907

Secretary of the Navy
John D. Long ... Contd
William H. Moody ... 1902
Paul Morton ... 1904
Charles J. Bonaparte ... 1905
Victor H. Metcalf ... 1906
Truman H. Newberry ... 1908

Secretary of the Interior
Ethan A. Hitchcock ... Contd
James R. Garfield ... 1907

Secretary of Agriculture
James Wilson ... Contd

Secretary of Commerce
and Labor
George B. Cortelyou ... 1903
Victor H. Metcalf ... 1904

Oscar S. Straus ... 1906

TAFT

Secretary of State
Philander C. Knox ... 1909

Secretary of the Treasury
Franklin MacVeagh ... 1909

Secretary of War
Jacob M. Dickinson ... 1909
Henry L. Stimson ... 1911

Attorney-General
George W. Wickersham 1909

Postmaster-General
Frank H. Hitchcock ... 1909

Secretary of the Navy
George von L. Meyer ... 1909

Secretary of the Interior
Richard A. Ballinger 1909
Walter L. Fisher ... 1911

Secretary of Agriculture
James Wilson ... Contd

Secretary of Commerce
and Labor
Charles Nagel ... 1909

WILSON

Secretary of State
William J. Bryan ... 1913
Robert Lansing ... 1915
Bainbridge Colby ... 1920

Secretary of the Treasury
William G. McAdoo ... 1913
Carter Glass ... 1918
David F. Houston ... 1920

Secretary of War
Lindley M. Garrison ... 1913
Newton D. Baker ... 1916

Attorney-General
James C. McReynolds 1913
Thomas W. Gregory ... 1914
A. Mitchell Palmer ... 1919

Postmaster-General
Albert S. Burleson ... 1913

Secretary of the Navy
Josephus Daniels ... 1913

Secretary of the Interior
Franklin K. Lane ... 1913
John B. Payne ... 1920

Secretary of Agriculture
David F. Houston ... 1913
Edwin T. Meredith ... 1920

Secretary of Commerce
William C. Redfield ... 1913
Joshua W. Alexander ... 1919

Secretary of Labor
William B. Wilson ... 1913

HARDING

Secretary of State
Charles E. Hughes ... 1921

Secretary of the Treasury
Andrew W. Mellon ... 1921

Secretary of War
John W. Weeks ... 1921

Attorney-General
Harry M. Daugherty ... 1921

Postmaster-General
Will H. Hays ... 1921
Hubert Work ... 1922
Harry S. New ... 1923

Secretary of the Navy
Edwin Denby ... 1921

Secretary of the Interior
Albert B. Fall ... 1921
Hubert Work ... 1923

Secretary of Agriculture
Henry C. Wallace ... 1921

Secretary of Commerce
Herbert Hoover ... 1921

Secretary of Labor
James J. Davis ... 1921

COOLIDGE

Secretary of State
Charles E. Hughes ... Contd
Frank B. Kellogg ... 1925

Secretary of the Treasury
Andrew W. Mellon ... Contd

Secretary of War
John W. Weeks ... Contd
Dwight F. Davis ... 1925

Attorney-General
Harry M. Daugherty ... Contd
Harlan F. Stone ... 1924
John G. Sargent ... 1925

Postmaster-General
Harry S. New ... Contd

Secretary of the Navy
Edwin Denby ... Contd
Curtis D. Wilbur ... 1924

Secretary of the Interior
Hubert Work ... Contd
Roy O. West ... 1928

Secretary of Agriculture
Henry C. Wallace ... Contd
Howard M. Gore ... 1924
William M. Jardine ... 1925

Secretary of Commerce
Herbert Hoover ... Contd
William F. Whiting ... 1928

Secretary of Labor
James J. Davis ... Contd

HOOVER

Secretary of State
Frank B. Kellogg ... Contd
Henry L. Stimson ... 1929

Secretary of the Treasury
Andrew W. Mellon ... Contd
Ogden L. Mills ... 1932

Secretary of War
James W. Good ... 1929
Patrick J. Hurley ... 1929

Attorney-General
William D. Mitchell ... 1929

Postmaster-General
Walter F. Brown ... 1929

Secretary of the Navy
Charles F. Adams ... 1929

Secretary of the Interior
Ray Lyman Wilbur ... 1929

Secretary of Agriculture
Arthur M. Hyde ... 1929

Secretary of Commerce
Robert P. Lamont ... 1929
Roy D. Chapin ... 1932

Secretary of Labor
James J. Davis ... Contd
William N. Doak ... 1930

F. ROOSEVELT

Secretary of State
Cordell Hull ... 1933
E. R. Stettinius, Jr. ... 1944

Secretary of the Treasury
William H. Woodin ... 1933
Henry Morgenthau, Jr. 1934

Secretary of War
George H. Dern ... 1933
Harry H. Woodring ... 1936
Henry L. Stimson ... 1940

Attorney-General
Homer S. Cummings ... 1933
Frank Murphy ... 1939
Robert H. Jackson ... 1940
Francis Biddle ... 1941

Postmaster-General
James A. Farley ... 1933
Frank C. Walker ... 1940

Secretary of the Navy
Claude A. Swanson ... 1933
Charles Edison ... 1940
Frank Knox ... 1940
James Forrestal ... 1944

Secretary of the Interior
Harold L. Ickes ... 1933

Secretary of Agriculture
Henry A. Wallace ... 1933
Claude R. Wickard ... 1940

Secretary of Commerce
Daniel C. Roper ... 1933
Harry L. Hopkins ... 1938
Jesse H. Jones ... 1940
Henry A. Wallace ... 1945

Secretary of Labor
Frances Perkins ... 1933

TRUMAN

Secretary of State
E. R. Stettinius, Jr. Contd
James F. Byrnes ... 1945
George C. Marshall ... 1947

Secretary of the Treasury
Henry Morgenthau, Jr. Contd
Fred M. Vinson ... 1945
John W. Snyder ... 1946

Secretary of Defense
James Forrestal ... 1947

Secretary of War
Henry L. Stimson ... Contd
Robert P. Patterson ... 1945

Attorney-General
Francis Biddle ... Contd
Tom C. Clark ... 1945

Postmaster-General
Frank C. Walker ... Contd
Robert E. Hannegan ... 1945
Jesse M. Donaldson ... 1947

Secretary of the Navy
James Forrestal ... Contd

Secretary of the Interior
Harold L. Ickes ... Contd
Julius C. Krug ... 1946

Secretary of Agriculture
Claude R. Wickard ... Contd
Clinton P. Anderson ... 1945
Charles F. Brannan ... 1948

Secretary of Commerce
Henry A. Wallace ... Contd
W. Averell Harriman ... 1946
Charles Sawyer ... 1948

Secretary of Labor
Frances Perkins ... Contd
Lewis B. Schwellenbach 1945
Maurice J. Tobin ... 1948

Lincoln's Gettysburg Address

The Battle of Gettysburg, one of the most noted battles of the Civil War, was fought on July 1, 2, and 3, 1863. On November 19, 1863, the field was dedicated as a national cemetery by President Lincoln in a two-minute speech that was to become immortal. At the time of its de-

livery the speech was relegated to the inside pages of the papers, while a two-hour address by Edward Everett, the leading orator of the time, caught the headlines.

The following is the text of the address revised by President Lincoln from his own notes:

FOURSCORE and seven years ago our fathers brought forth on this continent a new nation conceived in liberty and dedicated to the proposition that all men are created equal. Now we are engaged in a great civil war testing whether that nation, or any nation so conceived and so dedicated, can long endure. We are met on a great battlefield of that war. We have come to dedicate a portion of that field as a final resting-place for those who here gave their lives that that nation might live. It is altogether fitting and proper that we should do this. But, in a larger sense, we cannot dedicate, we cannot consecrate, we cannot hallow this ground. The brave men, living and dead, who struggled here have consecrated it far above our poor power to add or detract. The world will little note nor long remember what we say here, but it can never forget what they did here. It is for us the living rather to be dedicated here to the unfinished work which they who fought here have thus far so nobly advanced. It is rather for us to be here dedicated to the great task remaining before us—that from these honored dead we take increased devotion to that cause for which they gave the last full measure of devotion—that we here highly resolve that these dead shall not have died in vain, that this nation under God shall have a new birth of freedom, and that government of the people, by the people, for the people shall not perish from the earth.

The Monroe Doctrine

The Monroe Doctrine was announced in President James Monroe's message to Congress, during his second term on December 2, 1823 in part as follows:

"In the discussions to which this interest has given rise, and in the arrangements by which they may terminate, the occasion has been deemed proper for asserting as a principle in which rights and interests of the United States are involved, that the American continents, by the free and independent condition which they have assumed and maintain, are henceforth not to be considered as subjects for future colonization by any European power. . . . We owe it, therefore, to candor and to the amicable relations existing between the United States and those powers to declare that we should consider any attempt on their part to extend their system to any portion of this hemisphere as dangerous to our peace and safety. With the existing colonies or dependencies of any European power we have not interfered and shall not interfere. But with the governments who have declared their independence and maintain it, and whose independence we have, on great consideration and on just principles, acknowledged, we could not view any interposition for the purpose of oppressing them or controlling in any other manner their destiny by any European power in any other light than as the manifestation of an unfriendly disposition toward the United States."

Minority Presidents

Twelve candidates have become President of the U. S. with a popular vote less than 50 percent of the total vote cast. It should be noted, however, that in elections before 1872, presidential electors were not chosen by popular vote in all states. Adams' election in 1824 was by the House of Representatives, which chose him over Jackson, who had a plurality of both electoral and popular votes, but not a majority in the electoral college.

Besides Jackson in 1824, only two other candidates receiving the largest popular vote have failed to gain a majority in the electoral college—Samuel J. Tilden (D) in 1876 and Grover Cleveland (D) in 1888.

The "minority" Presidents follow:

Year	President	Elec- toral	Popular vote
		Pct.	Pct.
1824	John Q. Adams	31.8	29.8
1844	James K. Polk (D)	61.8	49.3
1848	Zachary Taylor (W)	56.2	47.3
1856	James A. Buchanan (D)	58.7	45.3
1860	Abraham Lincoln (R)	59.4	39.9
1876	Rutherford B. Hayes (R)	50.1	47.9
1880	James A. Garfield (R)	57.9	48.3
1884	Grover Cleveland (D)	54.6	48.8
1888	Benjamin Harrison (R)	58.1	47.8
1892	Grover Cleveland (D)	62.4	46.0
1912	Woodrow Wilson (D)	81.9	41.8
1916	Woodrow Wilson (D)	52.1	49.3

Diplomatic Personnel to and from the United States

Source: U. S. Department of State.

Country	U. S. representative to	Rank	Representative from	Rank
Afghanistan	Ely E. Palmer	Minister	Abdol Hosayn Aziz	Minister
Argentina	James M. Bruce	Ambassador	Dr. Jerónimo Remorino	Ambassador
Australia	Myron M. Cowen	Ambassador	Norman J. O. Makin	Ambassador
Austria	John G. Erhardt	Minister	Dr. Ludwig Kleinwaechter	Minister
Belgium	Adm. Alan G. Kirk	Ambassador	Baron Silvercruyts	Ambassador
Bolivia	Joseph Flack	Ambassador	Don Elicardo Martinez Vargas	Ambassador
Brazil	Herschel V. Johnson	Ambassador	Mauricio Nabuco	Ambassador
Bulgaria	Donald R. Heath	Minister	Nissim Mevorah	Minister
Burma	J. Klahr Huddle	Ambassador	U So Nyun	Ambassador
Canada	Laurence A. Steinhardt	Ambassador	Hume Wrong	Ambassador
Chile	Claude G. Bowers	Ambassador	Felix Nieto del Rio	Ambassador
China	J. Leighton Stuart	Ambassador	Dr. V. K. Wellington Koo	Ambassador
Colombia	Willard L. Beaulac	Ambassador	Don Gonzalo Restrepo-Jaramillo	Ambassador
Costa Rica	Nathaniel P. Davis	Ambassador	Don Mario A. Esquivel	Ambassador
Cuba	Robert Butler	Ambassador	Guillermo Belt	Ambassador
Czechoslovakia	(Vacant)	Ambassador	Dr. Vladimir Outrata	Ambassador
Denmark	Josiah Marvel, Jr.	Ambassador	Henrik de Kaufmann	Ambassador
Dominican Republic	(Vacant)	Ambassador	Dr. Luis Francisco Thomen	Ambassador
Ecuador	John F. Simmons	Ambassador	Don Augusto Dillon	Ambassador
Egypt	Stanton Griffiths	Ambassador	Anis Azer	Chargé d'affaires
Eire (Ireland)	George A. Garrett	Minister	Sean Nunan	Minister
El Salvador	Albert F. Nufer	Ambassador	Dr. Don Héctor David Castro	Ambassador
Estonia	(Legation closed)		Johannes Kalv	Act. Con. Gen.
Ethiopia	George R. Merrell	Minister	Ras H. S. Imru	Minister
Finland	Avra M. Warren	Minister	Dr. K. T. Jutila	Minister
France	Jefferson Caffery	Ambassador	Henri Bonnet	Ambassador
Germany	Robert D. Murphy	Political adviser	Sir Oliver Shewell Franks	Ambassador
Great Britain	Lewis W. Douglas	Ambassador	Vassili G. Dendramis	Ambassador
Greece	Henry F. Grady	Ambassador	Dr. Don Ismael González-Arévalo	Ambassador
Guatemala	Richard C. Patterson, Jr.	Ambassador	Joseph D. Charles	Ambassador
Haiti	William E. De Courcy	Ambassador	Dr. Don Julián R. Cáceres	Ambassador
Honduras	Herbert S. Bursley	Ambassador	Andrew Silk	Minister
Hungary	Selden Chapin	Minister	Thor Thors	Minister
Iceland	Richard P. Butrick	Ambassador	Sir Benegal Rama Rau	Ambassador
India	Loy Wesley Henderson	Ambassador	Russell Ala	Ambassador
Iran	John C. Wiley	Ambassador	Ali Jawdat	Ambassador
Iraq	Edward S. Crocker, II	Ambassador	Alberto Tarchiani	Ambassador
Italy	James Clement Dunn	Ambassador	Mr. Anctol Dinbergs	Chargé d'affaires
Latvia	(Legation closed)			

Lebanon	Lowell C. Pinkerton	Minister	Dr. Charles Malik	Minister
Liberia	Edward R. Dudley	Minister	Charles D. B. King	Minister
Liechtenstein	Austin R. Preston	Consul general		
Lithuania	(Legation closed)		Povilas Žadeikis	Minister
Luxemburg	Adm. Alan G. Kirk	Minister	Hugues Le Gallais	Minister
Mexico	Walter Thurston	Ambassador	Don Rafael de la Collina	Chargé d'affaires
Morocco	Edwin A. Platt	Dipl. Agent		
Nepal	Henry F. Grady	Minister	Subba Jewary Raj Misra	Chargé d'affaires
Netherlands	Herman B. Baruch	Ambassador	E. N. van Kleffens	Ambassador
New Zealand	Robert M. Scotten	Minister	Sir Carl Berendsen	Minister
Nicaragua	(Vacant)	Chargé d'affaires	Dr. Don Guillermo Sevilla Sacasa	Ambassador
Norway	Charles U. Bay	Ambassador	Wilhelm Munthe de Morgenstjerne	Ambassador
Pakistan	Paul H. Alling	Ambassador	M. A. H. Ispahani	Ambassador
Palestine & Trans-Jordan	Thomas C. Wasson	Consul		
Panama	Monnett B. Davis	Ambassador	Don Octavio A. Vallarino	Ambassador
Paraguay	Fletcher Warren	Ambassador	Dr. Don Juan Félix Morales	Ambassador
Peru	Harold Tittmann, Jr.	Ambassador	Don Alfredo Ferreyros	Ambassador
Philippines	Emmet O'Neal	Ambassador	Joaquin M. Elizalde	Ambassador
Poland	Waldemar J. Gallman	Ambassador	Jozef Winiewicz	Ambassador
Portugal	Lincoln MacVeagh	Ambassador	Pedro Theotónio Perelra	Ambassador
Rumania	Rudolf E. Schoenfeld	Minister	Mihal Ralea	Minister
Saudi Arabia	J. Rives Childs	Minister	Asad Al-Faqih	Minister
Siam	Edwin F. Stanton	Ambassador	Prince Wan Walthayakon	Ambassador
Spain	(Vacant)	Ambassador	Don Germán Baraibar	Chargé d'affaires
Sweden	H. Freeman Matthews	Ambassador	Herman Eriksson	Ambassador
Switzerland	John Carter Vincent	Minister	Charles Bruggmann	Minister
Syria	James Hugh Keeley, Jr.	Minister	Faiz El-Khourl	Minister
Turkey	George Wadsworth	Ambassador	Feridun C. Erkin	Ambassador
Union of South Africa	North Winship	Minister	H. T. Andrews	Minister
U. S. S. R.	Walter Bedell Smith	Ambassador	Alexander S. Panyushkin	Ambassador
Uruguay	Ellis O. Briggs	Ambassador	Dr. Juan Carlos Blanco	Ambassador
Vatican City	Myron C. Taylor	Special envoy		
Venezuela	Walter J. Donnelly	Ambassador	Dr. Gonzalo Carnevali	Ambassador
Yemen	J. Rives Childs	Minister		
Yugoslavia	Cavendish W. Cannon	Ambassador	Sava N. Kosanovic	Ambassador

Special Offices

JAPAN:	Tokyo (Office of U. S. Political Adviser to Supreme Commander for Allied Powers).
JAPAN:	Yokohama (Branch Office of U. S. Political Adviser to SCAP).
JAPAN:	Kobe (Branch Office of U. S. Political Adviser to SCAP).
KOREA:	Seoul (Office of U. S. Political Adviser, Staff of Commanding General, U. S. Occupation Forces in Korea).
TRIESTE:	Trieste (Office of U. S. Political Adviser to Commander, British-U. S. Zone, Free Territory of Trieste).

William J. Sebald, counselor of mission; H. Earle Russell, Foreign Service officer.
 U. Alexis Johnson, consul general.
 Douglas Jenkins, Jr., consul
 Joseph E. Jacobs, U. S. political adviser; William R. Langdon, U. S. political adviser, consul general.
 Robert P. Joyce, Ivan B. White, William E. Cole, Jr., Foreign Service officers.

Justices of the United States Supreme Court

Name	State	Term	Years Born	Died	Name	State	Term	Years Born	Died
*John Jay	N. Y.	1789-1795	6	1745 1829	John M. Harlan	Ky.	1877-1911	34	1833 1911
John Rutledge	S. C.	1789-1791	2	1739 1800	William B. Woods	Ga.	1880-1887	7	1824 1887
William Cushing	Mass.	1789-1810	21	1732 1810	Stanley Matthews	Ohio	1881-1889	8	1824 1889
James Wilson	Pa.	1789-1798	9	1742 1798	Horace Gray	Mass.	1881-1902	21	1828 1902
John Blair	Va.	1789-1796	7	1732 1800	Samuel Blatchford	N. Y.	1882-1893	11	1820 1893
James Iredell	N. C.	1790-1799	9	1751 1799	Lucius Q. Lamar	Miss.	1888-1893	5	1825 1893
Thomas Johnson	Md.	1792-1793	½	1732 1819	*Melville W. Fuller	Ill.	1888-1910	22	1833 1910
William Paterson	N. J.	1793-1806	13	1745 1806	David J. Brewer	Kans.	1889-1910	21	1837 1910
*John Rutledge	S. C.	1795-1795	..	1739 1800	Henry B. Brown	Mich.	1890-1906	16	1836 1913
Samuel Chase	Md.	1796-1811	15	1741 1811	George Shiras, Jr.	Pa.	1892-1903	11	1832 1924
*Oliver Ellsworth	Conn.	1796-1800	4	1745 1807	Howell E. Jackson	Tenn.	1893-1895	2	1832 1895
Bushrod Washington	Va.	1798-1829	31	1762 1829	Edward D. White	La.	1894-1910	16	1845 1921
Alfred Moore	N. C.	1800-1804	4	1755 1810	Rufus W. Peckham	N. Y.	1895-1909	14	1838 1909
*John Marshall	Va.	1801-1835	34	1755 1835	Joseph McKenna	Calif.	1898-1925	27	1843 1926
William Johnson	S. C.	1804-1834	30	1771 1834	Oliver W. Holmes	Mass.	1902-1932	30	1841 1935
Brock Livingston	N. Y.	1806-1823	17	1757 1823	William R. Day	Ohio	1903-1922	19	1849 1923
Thomas Todd	Ky.	1807-1826	19	1765 1826	William H. Moody	Mass.	1906-1910	4	1853 1917
Joseph Story	Mass.	1811-1845	34	1779 1845	Horace H. Lurton	Tenn.	1909-1914	5	1844 1914
Gabriel Duval	Md.	1811-1835	23	1752 1844	*Edward D. White	La.	1910-1921	11	1845 1921
Smith Thompson	N. Y.	1823-1843	20	1768 1843	Charles E. Hughes	N. Y.	1910-1916	6	1862
Robert Trimble	Ky.	1826-1828	2	1777 1828	Willis Van Devanter	Wyo.	1910-1937	26	1859 1941
John McLean	Ohio	1829-1861	32	1785 1861	Joseph R. Lamar	Ga.	1910-1916	6	1857 1916
Henry Baldwin	Pa.	1830-1844	14	1780 1844	Mahlon Pitney	N. J.	1912-1923	11	1858 1924
James M. Wayne	Ga.	1835-1867	32	1790 1867	Jas. C. McReynolds	Tenn.	1914-1941	26	1862 1946
*Roger B. Taney	Md.	1836-1864	28	1777 1864	Louis D. Brandeis	Mass.	1916-1939	23	1856 1941
Philip P. Barbour	Va.	1836-1841	5	1783 1841	John H. Clarke	Ohio	1916-1922	6	1857 1945
John Catron	Tenn.	1837-1865	28	1786 1865	*William H. Taft	Conn.	1921-1930	9	1857 1930
John McKinley	Ala.	1837-1852	15	1780 1852	George Sutherland	Utah	1922-1938	16	1862 1942
Peter V. Daniel	Va.	1841-1860	19	1784 1860	Pierce Butler	Minn.	1922-1939	17	1866 1939
Samuel Nelson	N. Y.	1845-1872	27	1792 1873	Edward T. Sanford	Tenn.	1923-1930	7	1865 1930
Levi Woodbury	N. H.	1845-1851	6	1789 1851	Harlan F. Stone	N. Y.	1925-1941	16	1872 1946
Robert C. Grier	Pa.	1846-1870	23	1794 1870	*Charles E. Hughes	N. Y.	1930-1941	11	1862
Benjamin R. Curtis	Mass.	1851-1857	6	1809 1874	Owen J. Roberts	Pa.	1930-1945	15	1875
John A. Campbell	Ala.	1853-1861	8	1811 1889	Benjamin N. Cardozo	N. Y.	1932-1938	6	1870 1938
Nathan Clifford	Maine	1858-1881	23	1803 1881	Hugo L. Black	Ala.	1937		1886
Noah H. Swayne	Ohio	1862-1881	18	1804 1884	Stanley F. Reed	Ky.	1938		1884
Samuel F. Miller	Iowa	1862-1890	28	1816 1890	Felix Frankfurter	Mass.	1939		1882
David Davis	Ill.	1862-1877	15	1815 1886	William O. Douglas	Conn.	1939		1898
Stephen J. Field	Calif.	1863-1897	34	1816 1899	Frank Murphy	Mich.	1940		1890
*Salmon P. Chase	Ohio	1864-1873	9	1808 1873	*Harlan F. Stone	N. Y.	1941-1946	5	1872 1946
William Strong	Pa.	1870-1880	10	1808 1895	James F. Byrnes	S. C.	1941-1942	1	1879
Joseph P. Bradley	N. J.	1870-1892	22	1813 1892	Robert H. Jackson	N. Y.	1941		1892
Ward Hunt	N. Y.	1872-1882	10	1810 1886	Wiley B. Rutledge	Iowa	1943		1894
*Morrison R. Waite	Ohio	1874-1888	14	1816 1888	Harold H. Burton	Ohio	1945		1888
					*Fred M. Vinson	Ky.	1946		1890

*Chief Justices.

†Appointed and served one term, but not confirmed by Senate.

Federal Impeachments

Source: Congressional Directory.

The Senate has sat as a court of impeachment in the following cases:

WILLIAM BLOUNT, Senator from Tennessee; charges dismissed for want of jurisdiction, January 14, 1799.

JOHN PICKERING, Judge of the U. S. District Court for New Hampshire; removed from office March 12, 1804.

SAMUEL CHASE, Associate Justice of the Supreme Court; acquitted March 1, 1805.

JAMES H. PECK, Judge of the U. S. District Court for Missouri; acquitted Jan. 31, 1831.

WEST H. HUMPHREYS, Judge of the United States District Court for the middle, eastern, and western districts of Tennessee; removed from office June 26, 1862.

ANDREW JOHNSON, President of the United States; acquitted May 26, 1868.

WILLIAM W. BELKNAP, Secretary of War; acquitted Aug. 1, 1876.

CHARLES SWAYNE, Judge of the United States District Court for the northern district of Florida; acquitted Feb. 27, 1905.

ROBERT W. ARCHBALD, Associate Judge, United States Commerce Court; removed from office January 13, 1913.

GEORGE W. ENGLISH, Judge of the U. S. District Court for the eastern district of Illinois; resigned office November 4, 1926; impeachment proceedings dismissed.

HAROLD LOUDERBACK, Judge of the U. S. District Court for the northern district of California; acquitted May 24, 1933.

HALSTED L. RITTER, Judge of the U. S. District Court for the southern district of Florida; removed April 17, 1936.

Tabulated Data on State Governments

Source: Questionnaires to the states.

State	Governor		Legislature					
	Term	Salary	Membership		Term	Frequency	Limit	Salaries of members ¹
			Sen.	Rep.	Sen. Rep.	of meeting	on reg. session	
Alabama.....	4 ²	\$6,000	35	106	4 4	Biennial	36 days	\$20 per diem
Arizona.....	2	10,000	19	57	2 2	Biennial	60 days	\$8 per diem
Arkansas.....	2	10,000	35	100	4 2	Biennial	60 days	\$1,200 per biennium
California.....	4	25,000	40	80	4 2	Annual	none	\$1,200 per annum
Colorado.....	2	10,000	35	65	4 2	Biennial	none	\$1,000 per biennium
Connecticut.....	2	12,000	36	272	2 2	Biennial	(³)	\$600 per elected term
Delaware.....	4 ⁴	7,500	17	35	4 2	Biennial	60 days	\$10 per diem
Florida.....	4 ²	12,000	38	95	4 2	Biennial	60 days	\$6 per diem
Georgia.....	4 ²	12,000	54	205	2 2	Biennial	70 days	\$10 per diem
Idaho.....	4 ¹	7,500	44	59	2 2	Biennial	60 days	\$10 per diem
Illinois.....	4	12,000	51	153	4 2	Biennial	6 mo.	\$3,000 per annum
Indiana.....	4 ²	8,000	50	100	4 2	Biennial	61 days	\$1,200 per annum
Iowa.....	2	12,000	50	108	4 2	Biennial	none	\$1,000 per session
Kansas.....	2	8,000	40	125	4 2	Biennial	none	\$3 per diem
Kentucky.....	4 ²	10,000	38	100	4 2	Biennial	60 days	\$15 per diem
Louisiana.....	4 ¹	12,000	39	100	4 4	Biennial	60 days	\$20 per diem
Maine.....	2	10,000	33	151	2 2	Biennial	none	\$850 per session
Maryland.....	4	4,500	29	123	4 4	Biennial	90 days	\$1,000 per annum
Massachusetts.....	2	20,000	40	240	2 2	Annual	none	\$2,750 per annum
Michigan.....	2	5,000	32	100	2 2	Biennial	none	\$3 per diem
Minnesota.....	2	12,000	67	131	4 2	Biennial	90 days	\$2,000 per biennium
Mississippi.....	4 ²	10,000	49	140	4 4	Biennial	none	\$1,500 per session
Missouri.....	4 ²	10,000	34	154	4 2	Biennial	none	\$1,500 per annum
Montana.....	4	7,500	56	90	4 2	Biennial	60 days	\$10 per diem
Nebraska.....	2	10,000	43 ⁵	...	2 ..	Biennial	none	\$1,744 per biennium
Nevada.....	4	7,600	17	43	4 2	Biennial	60 days	\$15 per diem
New Hampshire.....	2	5,000	24	400	2 2	Biennial	none	\$200 per session
New Jersey.....	4	20,000	21	60	4 2	Annual	none	\$3,000 per annum
New Mexico.....	2	10,000	24	49	2 4	Biennial	90 days	\$10 per diem
New York.....	4	25,000	56	150	2 2	Annual	none	\$5,000 per annum
North Carolina.....	4 ²	10,500	50	120	2 2	Biennial	none	\$600 per annum
North Dakota.....	2	6,000	49	113	4 2	Biennial	60 days	\$5 per diem
Ohio.....	2	13,000	33	135	2 2	Biennial	none	\$2,600 per annum
Oklahoma.....	4 ²	6,500	44	115	4 2	Biennial	75 days	\$1,200 per annum
Oregon.....	4 ⁴	10,000	30	60	4 2	Biennial	none	\$8 per diem
Pennsylvania.....	4 ²	18,000	50	208	4 2	Biennial	none	\$3,000 per session
Rhode Island.....	2	8,000	44	100	2 2	Annual	none	\$5 per diem
South Carolina.....	4 ²	7,500	46	124	4 2	Annual	40 days	\$1,000 per annum
South Dakota.....	2 ⁴	8,500	35	75	2 2	Biennial	60 days	\$1,050 per biennium
Tennessee.....	2 ⁶	8,000	33	99	2 2	Biennial	75 days	\$4 per diem
Texas.....	2	12,000	31	150	4 2	Biennial	none	\$10 per diem ⁷
Utah.....	4	7,500	23	60	4 2	Biennial	60 days	\$300 per annum
Vermont.....	2	8,000	30	246	2 2	Biennial	none	\$750 per biennium
Virginia.....	4 ²	10,000	40	100	4 2	Biennial	60 days	\$720 per session
Washington.....	4	6,000	46	99	4 2	Biennial	60 days	\$5 per diem
West Virginia.....	4 ²	10,000	32	94	4 2	Biennial	60 days	\$500 per annum
Wisconsin.....	2	10,000	33	100	4 2	Biennial	none	\$100 per month
Wyoming.....	4	8,000	27	56	4 2	Biennial	40 days	\$12 per diem

¹Does not include additional payment for expenses, mileage, etc.
²Not eligible to succeed himself. ³From Wed. following first Mon. of Jan. to Wed. following first Mon. of June. ⁴May not be elected to a third consecutive term. ⁵Unicameral legislature. ⁶May not be elected to a fourth consecutive term. ⁷For 120 days; then \$5 per diem.

New York Governors

It is often said that the governor of New York is almost certain to become a presidential candidate. Of the 41 elections held so far in U. S. history, 19 have had a New York governor or ex-governor for a major-party candidate. (In 1944, a governor and an ex-governor opposed each other.) These candidates were: George Clinton (twice),

John Jay, De Witt Clinton, Martin Van Buren (twice), Horatio Seymour, Samuel J. Tilden, Grover Cleveland (three times), Theodore Roosevelt (once; also once as third-party candidate), Charles E. Hughes, Alfred E. Smith, Franklin D. Roosevelt (four times) and Thomas E. Dewey (twice).

SPEAKERS OF THE HOUSE OF REPRESENTATIVES

Source: Congressional Directory.

Name and state	Congress	Dates served	Name and state	Congress	Dates served
F. A. C. Muhlenburg (Pa.)	1	1789-1791	James L. Orr (S. C.)	35	1857-1859
Jonathan Trumbull (Conn.)	2	1791-1793	William Pennington (N. J.)	36	1859-1861
F. A. C. Muhlenburg (Pa.)	3	1793-1795	Galusha A. Grow (Pa.)	37	1861-1863
Jonathan Dayton (N. J.) ¹	4-5	1795-1799	Schuyler Colfax (Ind.)	38-40	1863-1866
Theodore Sedgwick (Mass.)	6	1799-1801	Theodore M. Pomeroy (N. Y.) ⁵	40	1869-1869
Nathaniel Macon (N. C.)	7-9	1801-1807	James G. Blaine (Maine)	41-43	1869-1875
Joseph B. Varnum (Mass.)	10-11	1807-1811	Michael C. Kerr (Ind.) ⁶	44	1875-1876
Henry Clay (Ky.) ²	12-13	1811-1814	Samuel J. Randall (Pa.)	44-46	1876-1881
Langdon Cheves (S. C.)	13	1814-1815	J. Warren Keifer (Ohio)	47	1881-1883
Henry Clay (Ky.) ³	14-16	1815-1820	John G. Carlisle (Ky.)	48-50	1883-1889
John W. Taylor (N. Y.)	16	1820-1821	Thomas B. Reed (Maine)	51	1889-1891
Philip P. Barbour (Va.)	17	1821-1823	Charles F. Crisp (Ga.)	52-53	1891-1895
Henry Clay (Ky.)	18	1823-1825	Thomas B. Reed (Maine)	54-55	1895-1899
John W. Taylor (N. Y.)	19	1825-1827	David B. Henderson (Iowa)	56-57	1899-1903
Andrew Stevenson (Va.) ⁴	20-23	1827-1834	Joseph G. Cannon (Ill.)	58-61	1903-1911
John Bell (Tenn.)	23	1834-1835	Champ Clark (Mo.)	62-65	1911-1919
James K. Polk (Tenn.)	24-25	1835-1839	Frederick H. Gillett (Mass.)	66-68	1919-1925
Robert M. T. Hunter (Va.)	26	1839-1841	Nicholas Longworth (Ohio)	69-71	1925-1931
John White (Ky.)	27	1841-1843	John N. Garner (Tex.)	72	1931-1933
John W. Jones (Va.)	28	1843-1845	Henry T. Rainey (Ill.)	73	1933-1934
John W. Davis (Ind.)	29	1845-1847	Joseph W. Byrns (Tenn.) ⁷	74	1935-1936
Robert C. Winthrop (Mass.)	30	1847-1849	William B. Bankhead (Ala.) ⁸	74-76	1936-1940
Howell Cobb	31	1849-1851	Sam Rayburn (Tex.)	76-79	1940-1946
Linn Boyd	32-33	1851-1855	Joseph W. Martin, Jr. (Mass.)	80	1947-
Nathaniel P. Banks (Mass.)	34	1855-1857			

¹George Dent (Md.) was elected Speaker pro tempore for Apr. 20 and May 28, 1798.²Resigned during 2d session of 13th Congress.³Resigned between 1st and 2d sessions of 16th Congress.⁴Resigned during 1st session of 23d Congress.⁵Elected Speaker and served the day of adjournment.⁶Died between 1st and 2d sessions of 44th Congress. During 1st session, there were two Speakers pro tempore: Samuel S. Cox (N. Y.), appointed for Feb. 17, May 12 and June 19, 1876; and Milton Saylor (Ohio), appointed for June 4, 1876.⁷Died during 2d session of 74th Congress. ⁸Died during 3d session of 76th Congress.

The White House

The White House, the official residence of the President, is located on Pennsylvania Avenue in Washington, D. C. The site covering about 16 acres was selected by President Washington and Pierre Charles L'Enfant, and the architect was James Hoban. The design of the mansion is said to have been suggested by the Duke of Leinster's Palace in Ireland. The cornerstone was laid Oct. 13, 1792, and the first residents were President and Mrs. John Adams in Nov., 1800. The building was fired by the British in 1814, and the sandstone exterior was painted white in 1815.

The rooms for public functions are on

the first floor; on the second are the President's apartments. The most celebrated public room is the East Room, where formal receptions take place. Other public rooms are the Red Room, the Green Room, and the Blue Room. The State Dining Room is used for formal dinners.

The Executive Office, a three-story structure at the west end of the West Terrace, was added to the original building in 1902 to accommodate the President's office staff, and several additions have since been made. In 1942, a three-story building was erected on the East Terrace, and now serves as the White House main entrance.

Principal Bills and Treaties, 1900-48

PARTY ABBREVIATIONS

Dem.—Democratic
Rep.—RepublicanA.L.—American Labor
F.L.—Farmer-LaborInd.—Independent
Prog.—ProgressiveProh.—Prohibition
Soc.—Socialist

Bill or treaty	Party	House vote		Senate vote		Date enacted
		Yea	Nay	Yea	Nay	
Hay-Pauncefote Treaty. England agreed the U.S. can build and control an Isthmian canal open to all nations on equal terms (ratified Dec. 16, 1901).		No vote required		72	6	Nov. 18, 1901
Newlands Act. Authorized irrigation projects in 16 western states.		146	55	No roll-call vote		June 17, 1902
Spooner Bill. Authorized purchase of New Panama Canal Company's rights.		252	8	67	6	June 28, 1902
Elkins Act. Forbade railroads from deviating from published rates; punished givers and receivers of rebates.		241	6	No record vote		Feb. 19, 1903
Hay-Bunau-Varilla Treaty. Granted the U.S. a ten-mile strip in Panama in perpetuity for \$10,000,000 in gold and an annuity of \$250,000.	Dem. Rep.	No vote required		9 41	15 1	Mar. 19, 1903
Hepburn Rate Bill. Gave the ICC control over express companies and pipe lines; allowed them to reduce rates upon complaint of shipper; outlawed midnight rates; forbade free passes; required uniform book-keeping system.		216	4	71	3	June 29, 1906
Pure Food and Drug Act. Made shipments in interstate commerce of adulterated foods and drugs illegal.		240	17	63	4	June 30, 1906
Payne-Aldrich Tariff. Protective, averaging 36.38 percent; lowered rates on coal, lumber, etc.; free list included wood pulp, oil, etc.		195	183	47	31	Aug. 5, 1909
Immigration Act. Barred paupers, anarchists, criminals, and diseased persons.						Mar. 26, 1910
Mann-Elkins Act. Gave the ICC jurisdiction over telephone and telegraph companies; right to alter railroad rates on their own initiative.		200	126	50	12	June 18, 1910
Admission of New Mexico.		No roll-call vote		53	8	Jan. 6, 1912
Admission of Arizona.		No roll-call vote		53	8	Feb. 14, 1912
16th Amendment. Legalized the income tax.		317	14	77	0	Feb. 25, 1913
Webb-Kenyon Interstate Liquor Shipment Act. Forbade transportation of liquor from wet to dry states.		240	65	No roll-call vote		Vetoed, Feb. 23, 1913
		244	(Reconsideration vote) 95	62	21	Mar. 1, 1913
17th Amendment. Provided for popular election of Senators.		237	39	64	24	May 31, 1913
Underwood-Simmons Tariff. Averaged 26.67 percent with 958 reductions, 86 increases and 307 unchanged items.		254	103	36	17	Oct. 3, 1913
Glass-Owen Bill. Established a Federal Reserve system.		298	60	43	25	Dec. 23, 1913
Federal Trade Commission. Established to enforce anti-trust laws.		No roll-call vote		53	16	Sept. 26, 1914
Clayton Antitrust Act. Prohibited monopolistic price discrimination, restrictive sales or leases, intercorporate stock holding, interlocking directorates of competing companies capitalized at \$1,000,000 or more. Exempted labor from antitrust laws and declared peaceful picketing legal.		244	54	35	24	Oct. 15, 1914
Federal Farm Loan Act. Created system of land banks to lend money to farmers on their land and permanent improvements.		No roll-call vote		58	5	July 17, 1916
Keating-Owen Act. Forbade shipping in interstate commerce of goods produced by children. (Declared unconstitutional in 1918.)		337	46	52	12	Sept. 1, 1916

Bill or treaty	Party	House vote		Senate vote		Date enacted
		Yea	Nay	Yea	Nay	
Adamson Act. Limited working hours of railroad employees to 8 per day on interstate railroads.		259	36	43	28	Sept. 3-5, 1916*
Burnett Immigration Bill. Required literacy test for immigrants.		308	87	64	7	Vetoed, Jan. 29, 1917
		(Reconsideration vote)				
		285	106	62	19	Feb. 5, 1917
Armed Neutrality Act. Allowed American vessels to be armed in war zones.				Filibustered		Defeated, Mar. 4, 1917
Declaration of War. Against Germany (World War I).		373	50	82	6	Apr. 6, 1917
Volstead Act. Prohibited manufacture, transportation and sale of beverages containing more than .5 percent alcohol.		321	70	Voice vote approval		Vetoed, Oct. 27, 1919
		(Reconsideration vote)				
	Dem.	...	...	27	11	Oct. 28, 1919
	Rep.	...	...	38	9	1919
Treaty of Versailles.	Dem.	No vote required		4	42	Rejected, Nov. 19, 1919
	Rep.			35	13	
18th Amendment. Forbade manufacture, sale and transportation of intoxicating liquors.	Dem.	141	64	36	12	Jan. 16, 1920
	Rep.	137	62	29	8	
	Ind.	2	...	..	..
	Proh.	1	...	..	..
	Prog.	1	1	..	..
	Soc.	...	1	..	..
Transportation Act. Reorganized ICC with 11 members and increased powers; authorized loans to railroads; created Railroad Labor Board; provided for consolidation of railroads.		250	150	47	17	Feb. 29, 1920
Treaty of Versailles.	Dem.	No vote required		21	23	Rejected, Mar. 19, 1920
	Rep.			28	12	
Federal Water Power Act. Created federal power commission to license citizens who use navigable streams for power; licenses limited to 50 years.				52	18	June 18, 1920
19th Amendment. Gave women the right to vote.	Dem.	102	70	20	17	Aug. 26, 1920
	Rep.	200	19	36	8	
	Ind.	1	...	..	..
	Prog.	1	...	..	..
Emergency Quota Act. Limited annual number of immigrants from any country to 3 percent of that nationality living in U.S. in 1910. (Renewed in 1922 for two more years.)		No record vote		78	1	May 19, 1921
Emergency Tariff Act. Raised rates on agricultural articles, wool, sugar, chemicals, etc.	Dem.	...	...	7	27	May 27, 1921
	Rep.	...	...	56	1	
Capper-Volstead Act. Exempted farm cooperatives from antitrust laws.		284	49	58	1	Feb. 13, 1922
Washington Conference Treaties:						
Four Power Pacific Peace Pact. Related to Pacific island possessions of Britain, France, U.S., and Japan.	Dem.	No vote required		12	23	Mar. 24, 1922
	Rep.			55	4	
Five Power Limitation on Naval Armaments Treaty. Powers were U.S., Britain, France, Italy and Japan.		No vote required		74	1	Mar. 29, 1922
Nine Power Treaty. Guaranteed the territorial integrity of China.		No vote required		65	0	Mar. 30, 1922
Fordney-McCumber Tariff. Highly protective, averaging 33.22 percent; gave tariff commission power to suggest that President increase or decrease rates not more than 50 percent of original rate on any item to meet competition.	Dem.	...	...	3	24	Sept. 21, 1922
	Rep.	...	...	45	1	
World Court Protocol.	Dem.	No vote required		23	3	Defeated, Mar. 3, 1923
	Rep.			1	46	

*As Sept. 3 was a Sunday, the validity of the President's signature was questioned. Therefore, the bill was re-signed on the following Tuesday.

Bill or treaty	Party	House vote		Senate vote		Date enacted
		Yea	Nay	Yea	Nay	
Federal Intermediate Credit Act. Lent money to farmers to extent of 75 percent of value of harvested crops and livestock.		277	3	No record	vote	Mar. 4, 1923
Bonus Bill. Provided 20-year endowment policies for veterans.	Dem.	177	20	32	0	Vetoed, May 15, 1924
	Rep.	175	34	33	8	
	F.L.	1	...	2	..	
	Soc.	1	...	..	..
	Ind.	1	(Reconsideration vote)
	Dem.	145	21	27	9	
	Rep.	166	57	30	17	
	F.L.	...	...	2	..
	Soc.	1	...	..	..
	Ind.	1	...	..	..
Immigration Quota Law. Limited annual number of immigrants to 2 percent of each country's residents in U.S. in 1890. After 1927, the number was to be limited annually to 150,000. Did not apply to nations of Western Hemisphere.		308	58	69	9	May 26, 1924
World Court Membership.	Dem.	No vote required		36	2	Jan. 27, 1926
	Rep.			40	14	
	F.L.			..	1	
McNary-Haugen Bill. Lent money to farm cooperatives and paid farmers equalizing price on their products.	Dem.	97	70	22	17	Vetoed, Feb. 25, 1927; no reconsideration vote
	Rep.	113	108	24	22	
	F.L.	2	...	1	..	
	Soc.	1	...	..	..
	Ind.	1	...	..	..
McNary-Haugen Bill. (Re-passage of bill the following year.)	Dem.	100	53	28	9	Vetoed, May 23, 1928
	Rep.	101	68	24	14	
	F.L.	2	...	1	..	
	Soc.	1	...	..	..
		(Reconsideration vote)		29	12	Defeated, May 25, 1928
	Dem.			20	19	
	F.L.			1	..	
Norris-Morin Resolution. Would have completed construction of Muscle Shoals for nitrates and power.		251	165	48	25	Pocket veto, June 4, 1928
Kellogg-Briand Pact. Outlawed wars and prescribed arbitration of international disputes.		No vote required		85	1	Jan. 15, 1929
Agricultural Marketing Act. Created federal farm board with power to lend money to farm cooperatives and to create stabilization corporations to buy farm surplus and to store and sell abroad to maintain prices.	Dem.	121	32	33	2	June 15, 1929
	Rep.	245	2	21	32	
	F.L.	1	...	..	..
Hawley-Smoot Tariff. Very high protective tariff, averaging 40.08 percent but giving President power to initiate reduction or increase in rates.	Dem.	14	132	5	30	June 17, 1930
	Rep.	203	20	39	11	
	F.L.	...	1	..	1	
Bonus Loan Bill. Increased amount veterans might borrow and reduced interest rate.	Dem.	150	...	37	..	Vetoed, Feb. 26, 1931
	Rep.	212	39	34	12	
	F.L.	1	...	1	..	
		(Reconsideration vote)		39	1	Feb. 27, 1931
	Dem.			79	36	
	Rep.			1	..	
	F.L.			...	...
Norris Resolution. Would have completed Muscle Shoals.	Dem.	128	3	35	2	Vetoed, Mar. 3, 1931; no reconsideration vote
	Rep.	87	150	20	26	
	F.L.	1	...	..	..
War Debt Moratorium. Provided for moratorium on payment of interest and war debt installments by nations indebted to U.S.	Dem.	120	95	33	6	Dec. 23, 1931
	Rep.	196	5	36	6	
	F.L.	1	...	..	..
Reconstruction Finance Corporation. Established with a working fund of \$500,000,000 and power to borrow more to release frozen assets in banks and mortgage companies and to help bankrupt railroads.	Dem.	153	43	29	5	Jan. 22, 1932
	Rep.	182	12	34	3	

Bill or treaty	Party	House vote		Senate vote		Date enacted
		Yea	Nay	Yea	Nay	
Norris-LaGuardia Act. Limited granting of injunctions against labor; required open testimony in open court and outlawed yellow dog contracts.		363	13	75	5	Mar. 23, 1932
Hawes-Cutting Bill. Granted Philippine independence but was rejected by the Philippine legislature because of its economic and immigration provisions.		No record vote (Reconsideration vote)		No record vote		Vetoed, Jan. 13, 1933
	Dem.	191	1	45	1	
	Rep.	82	93	20	25	
	F.L.	1	...	1	..	
20th Amendment. Changed date of meeting of Congress to Jan. 3 and date of Presidential inauguration to Jan. 20; authorized procedure for selection of filling vacancies in Presidency.		335	56	73	3	Jan. 23, 1933
3.2 Percent Liquor Law. Legalized manufacture and sale of 3.2 wines and beers.	Dem. Rep.	No record vote		33 10	19 17	Mar. 22, 1933
Civilian Conservation Corps. Created to relieve unemployment and to work at reforestation, road building and flood control.		No roll-call vote		No roll-call vote		Mar. 31, 1933
Agricultural Adjustment Act. Created the AAA, which was authorized to limit acreage on specified crops at farmers' option and to pay benefits to farmers; money for this purpose to be raised by a process tax, which was declared unconstitutional Jan. 16, 1936.		315	98	52	31	May 12, 1933
Tennessee Valley Authority. Established to develop and sell electric power, to serve as yardstick for electricity rates, to develop rural electrification, to establish flood control, and to produce fertilizer.	Dem. Rep. F.L.	284 17 5	2 89 ...	48 14 1	3 17 ..	May 18, 1933
Federal Securities Act. Required that all stock and bond issues be registered and approved.		No roll-call vote		No roll-call vote		May 27, 1933
Home Owners Refinancing Act. Established the HOLC, which took over mortgages in exchange for bonds in order to save home owners from losing homes.		383	4	No record vote		June 13, 1933
Glass-Steagall Banking Act. Created Federal Deposit Insurance Corporation to insure deposits up to \$5000; required that private banks be either investment or deposit banks, but not both.		No record vote		No roll-call vote		June 16, 1933
National Industrial Recovery Act. Created NRA; authorized establishment of trade associations; suspended antitrust laws; authorized drawing-up of codes of Fair Competition to be accepted by President; guaranteed collective bargaining and required employers to accept approved maximum and minimum wage provisions. (Declared unconstitutional in 1935.)	Dem. Rep. F.L.	266 53 4	25 50 ...	46 10 1	4 20 ..	June, 16, 1933
21st Amendment. Repealed prohibition.	Dem. Rep. F.L.	179 109 1	32 89 ...	33 29 1	9 14 ..	Dec. 5, 1933
Gold Reserve Act. Gave President power to devalue gold and to impound for treasury all gold in Federal System and to establish Exchange Stabilization Fund.	Dem. Rep. F.L.	287 68 5	2 38 ...	55 10 1	1 22 ..	Jan. 30, 1934
Farm Mortgage Refinancing Act. Created Federal Farm Mortgage Corporation to assist farmers in payment of mortgages on easier interest terms.		No record vote		No record vote		Jan. 31, 1934
Tydings-McDuffie Act. Gave the Philippine Islands independence.	Dem. Rep. F.L.	No roll-call vote		51 16 1	.. 8 ..	Mar. 24, 1934
Johnson Debt Default Bill. Forbade sale in this country of securities of defaulting countries.		No record vote		No record vote		Apr. 13, 1934
Home Owners Loan Act. Supplemented Home Owners Refinancing Act.		337	1	35	34	Apr. 28, 1934
Securities and Exchange Act. Established Securities and Exchange Commission; required licensing of stock exchanges; made certain speculative practices illegal; gave Federal Reserve Board power to fix margins; required full financial statements from registered companies.	Dem. Rep. F.L.	254 22 4	11 73 ...	47 15 ..	1 12 ..	June 6, 1934

Bill or treaty	Party	House vote Yea Nay	Senate vote Yea Nay	Date enacted		
Trade Agreements Act. Authorized President to reduce tariffs by as much as 50 percent of prevailing rates for those countries which granted the U.S. most favored nation treatment without the need for Senatorial ratification for three years.	Dem. Rep. F.L.	No record vote	51 5 1	5 28 ..	June 12, 1934	
National Housing Act. Created Federal Housing Administration to administer funds for modernizing homes and for lending for new construction.		176	19	No record vote	June 28, 1934	
Federal Farm Bankruptcy Act (Frazier-Lemke Act). Declared moratorium on farm mortgage foreclosures. (Declared unconstitutional in May, 1935.)		No record vote	60	16	June 28, 1934	
World Court Ratification.	Dem. Rep. F.L. Prog.	No vote required	43 9	20 14 1 1	Defeated, Jan. 29, 1935	
Soldiers' Bonus Bill. Would have paid off veterans compensation certificates.		318	90	55	33	Vetoed, May 22, 1935
		322	(Reconsideration vote) 98	40	54	Defeated, May 23, 1935
National Labor Relations Act (Wagner-Connery Act). Created the NLRB with power to determine appropriate collective bargaining unit subject to elections they supervised at request of the workers; to certify the duly chosen trade union and to take testimony about unfair employer practices and issue cease and desist orders.	Dem. Rep. F.L. Prog.	No record vote	49 12 1 1	4 8	July 5, 1935	
Social Security Act. Created social security board to administer old age benefits based on earnings before the age of 65; unemployment administered under state laws and grants to states to aid the needy aged, blind, orphans, widows, etc.		372	33	76	6	Aug. 14, 1935
Glass-Steagall Banking Act. Increased power of Federal Reserve Board of Governors over open market and credit transactions.		No record vote	No record vote	No record vote	Aug. 23, 1935	
Public Utilities Act (Wheeler-Rayburn Act). Required all public utilities to register with the SEC and limited utility holding corporations to first degree unless necessity required greater complexity.	Dem.	203	59	No record vote	Aug. 26, 1935	
	Rep.	7	83			
	F.L.	3	...			
	Prog.	6	...			
Farm Mortgage Moratorium Act. Allowed three-year moratorium on foreclosures with court permission upon payment of reasonable rental.		No record vote	No record vote	No record vote	Aug. 29, 1935	
Soldiers' Bonus Bill. Made 9-year 3-percent bonds redeemable on demand.	Dem.	265	29	56	9	Vetoed, Jan. 24, 1936
	Rep.	72	30	15	7	
	F.L.	3	...	2	..	
	Prog.	6	...	1	..	
		(Reconsideration vote)				Jan. 27, 1936
	Dem.	248	32	57	12	
	Rep.	66	29	16	7	
	F.L.	3	...	2	..	
Soil Conservation and Domestic Allotment Act. Granted payments to farmers who let their land lie fallow or planted cover crops.	Dem.	246	25	49	9	Mar. 2, 1936
	Rep.	20	64	5	11	
	F.L.	1	1	1	..	
	Prog.	...	7	1	..	
Reciprocal Trade Agreement Act. Extended to June, 1940, period during which President is authorized to negotiate foreign trade under Trade Agreements Act of 1934.		284	0	58	24	Mar. 1, 1937
Neutrality Act. Forbade export of arms and ammunition to belligerents, the sale in this country of belligerents' securities, the use of American ships for carrying munitions; required belligerents to pay upon purchase and carry all purchases in their own ships (cash and carry clause).		377	12	41	15	May 1, 1937

Bill or treaty	Party	House vote		Senate vote		Date enacted	
		Yea	Nay	Yea	Nay		
Judiciary Act. Allowed voluntary retirement of Supreme Court justices and other federal court judges on full pension at age of 70.		No roll-call vote		Unanimous, no roll-call vote		Aug. 25, 1937	
National Housing Act. Established the U.S. Housing Authority to administer loans to local communities and states for rural and urban construction. (Amended in 1938.)		275	86	64	16	Sept. 2, 1937	
National Housing Act Amendment.	Dem.	No record vote		41	25	Feb. 4, 1938	
	Rep.			..	13		
	F.L.			..	1		
	Prog.			..	1		
	Ind.			1	..		
Agricultural Adjustment Act. Continued soil conservation program; provided parity payments and commodity loans to farmers; established crop insurance corporations and ever-normal granary plan.	Dem.	243	54	53	17	Feb. 16, 1938	
	Rep.	14	74	2	11		
	F.L.	5	..	..	2
	Prog.	1	7	..	1		
	Ind.	..	..	1	..
Wage and Hours Act. Provided minimum wage of 25 cents to rise to 40 cents after 6 years; limited hours from 44 per week the first year to 40 after the third year; goods produced by "oppressive child labor" could not be shipped in interstate commerce.	Dem.	247	41	No record vote		June 25, 1938	
	Rep.	31	48				
	F.L.	5	..				
	Prog.	7	..				
Reciprocal Trade Agreement Act. Extended Trade Agreements Act of 1937 three more years.	Dem.	212	20	41	15	Apr. 12, 1940	
	Rep.	5	146	..	20		
	F.L.	..	1	..	2		
	Prog.	..	1	..	..
	Ind.	..	..	1	..
	A.L.	1	..	..	..
Selective Service Act. Established system for compulsory service in armed forces. (Extended in 1941.)	Dem.	211	33	50	17	Sept. 16, 1940	
	Rep.	52	112	8	10		
	F.L.	..	1	..	2		
	Prog.	..	2	..	1		
	Ind.	..	..	..	1
	A.L.	..	1	..	..
Lend-Lease. Provided system whereby U.S. lent goods and munitions to democratic nations in return for services and goods.		260	165	60	31	Mar. 11, 1941	
Selective Service Act Extension. Extended period of service to not more than 30 months in time of peace and eliminated 900,000-man limit of Army.	Dem.	182	65	38	16	Aug. 18, 1941	
	Rep.	21	133	7	13		
	Prog.	..	3	..	1		
	A.L.	..	1	..	..
		
Declarations of World War II: Against Japan.	Dem.	235	..	56	..	Dec. 8, 1941	
	Rep.	149	1	24	..		
	Prog.	3	..	1	..		
	Ind.	..	..	1	..
	A.L.	1	..	..	..
Against Germany.		393	0	88	0	Dec. 11, 1941	
U.N. Charter Ratification.	Dem.	No vote required		53	..	July 28, 1945	
	Rep.			35	2		
	Prog.			1	..		
Case Bill. Would have set up mediation board, established enforceable 30-day cooling-off periods in labor disputes, outlawed boycotts and sympathy strikes, and authorized court injunctions.	Dem.	97	91	33	13	Vetoed, June 11, 1946	
	Rep.	133	13	28	6		
	Prog.	..	1	..	1		
	A.L.	..	1	..	..
		
	Dem.	96	118	(Reconsideration vote) No vote required		Defeated, June 11, 1946	
	Rep.	159	15				
	Prog.	..	1				
	A.L.	..	1				
				
British Loan Act. Established \$3,750,000,000 credit to Britain, including \$650,000,000 in lend-lease.	Dem.	157	32	29	15	July 15, 1946	
	Rep.	61	122	17	18		
	Prog.	..	1	..	1		
	A.L.	1	..	..	..

Bill or treaty	Party	House vote		Senate vote		Date enacted
		Yea	Nay	Yea	Nay	
Atomic Energy Commission. Created five-man controlled commission without military representation but with military liaison; permitted Army and Navy to make atomic weapons; forbade distribution of fissionable materials or atomic energy information.		No record vote		No record vote		Aug. 1, 1946
Greek-Turkey Aid Bill. Authorized \$400,000,000 to furnish aid to Greece and Turkey upon application, subject to withdrawal upon request of countries, of the U.N. Security Council or General Assembly, or of President if improperly used or unnecessary.	Dem.	160	13	32	7	May 22, 1947
	Rep.	127	93	35	16	
	A.L.	...	1	..	..
Treaty Ratifications: With Italy.	Dem. Rep.	No vote required		37 42	3 7	June 14, 1947
With Rumania.		No vote required		Voice vote approval		June 14, 1947
With Bulgaria.		No vote required		Voice vote approval		June 14, 1947
With Hungary.		No vote required		Voice vote approval		June 14, 1947
Income Tax Reduction Bill. Would have reduced income tax rates on a sliding scale, ranging from 10.5 to 30 percent on July 1, 1947.	Dem.	37	97	6	26	Vetoed, June 16, 1947
	Rep.	183	1	42	2	
	A.L.	...	1	..	..
		(Reconsideration vote)				Defeated, June 17, 1947
	Dem.	35	134	No vote required		
	Rep. A.L.	233 ...	2 1			
Taft-Hartley Bill (Labor-Management Relations Act, 1947). Prohibits closed shops but allows union shops by secret vote of majority of employees; makes unions subject to damage suits for unfair labor practices, such as boycotts or jurisdictional strikes; requires unions to file financial reports; requires union leaders to file statements that they are not Communistic.	Dem.	103	66	17	15	Vetoed, June 20, 1947
	Rep.	217	12	37	2	
	A.L.	...	1	..	..
		(Reconsideration vote)				June 23, 1947
	Dem.	106	71	20	22	
	Rep. A.L.	225 ...	11 1	48 ..	3 ..	
Rent Control Bill. Continued federal rent control to Feb. 29, 1948, but permitted 15 percent increase if mutually agreed to by tenant and landlord for lease running to Dec. 31, 1948 (leases once signed take property out of rent control); decontrolled non-residential buildings		163	73	Voice vote approval		June 30, 1947
Presidential Succession Act. Made Speaker of House and President of Senate pro tempore next in line after Vice President.		365	11	50	35	July 18, 1947
Income Tax Reduction Bill (Second Version). Same provisions as first bill but with effective date changed to Jan. 1, 1948.	Dem.	69	109	12	30	Vetoed, July 18, 1947
	Rep.	233	2	48	2	
	A.L.	...	1	..	..
		(Reconsideration vote)				Defeated, July 18, 1947
	Dem.	63	105	10	33	
	Rep. A.L.	236 ...	2 1	47 ..	3 ..	
National Security Act of 1947. Reorganized and coordinated armed forces under National Military Establishment headed by Secretary of Defense (of Cabinet rank) and including Secretaries of the Army, the Navy and the Air Force.		Voice vote approval		Voice vote approval		July 26, 1947
Rent Control Bill. Extended controls through Mar. 31, 1949; provided Emergency Court of Appeals to decide on decontrols or increases recommended by local boards but rejected by Federal Housing Expediter.		220	95	Voice vote approval		Mar. 30, 1948
Income Tax Reduction Bill. Provided \$4.8 billion reduction in nation's income taxes, effective May 1 and retroactive to Jan. 1.	Dem.	84	64	30	11	Vetoed, Apr. 2, 1948
	Rep.	205	0	48	0	
	A.L.	0	2	..	..
		(Reconsideration vote)				Apr. 2, 1948
	Dem.	82	84	27	10	
	Rep. A.L.	229 0	2 2	50 ..	0 ..	

Bill or treaty	Party	House vote		Senate vote		Date enacted
		Yea	Nay	Yea	Nay	
Foreign Assistance Act of 1948. Authorized \$5.3 billion 1-year European Recovery Program, \$275 million for military aid to Greece and Turkey, \$463 million in economic and military aid for China, \$60 million for U.N. Fund for Children.	Dem. Rep. A.L.	150 167 0	11 62 2	Voice vote approval		Apr. 3, 1948
Air Force and Navy Aircraft Bill. Appropriated \$3,198,-100,000 for 70-group Air Force and expansion of naval aviation.		Voice vote approval		Voice vote approval		May 21, 1948
Selective Service Act. Provided for registration of all men 18-25 and induction of enough men 19-25 to maintain Army of 837,000, Navy and Marine Corps of 666,882, and Air Force of 502,000.		259	136	Voice vote approval		June 24, 1948
Displaced Persons Bill. Admitted 205,000 European displaced persons, including 3,000 orphans.		Voice vote approval		Voice vote approval		June 25, 1948
Foreign Aid Appropriations. Appropriated funds for 1 year: \$5.055 billion for ERP, \$400 million for China, \$1.3 billion for occupied areas, \$225 million for Greece and Turkey, \$35 million for U.N. Fund for Children, \$70,710,228 for IRO.		318	62	Voice vote approval		June 28, 1948
Housing Bill. Authorized Federal loans for private construction of low-cost homes and apartments; liberalized loans to manufacturers of prefabricated houses.		351	9	Voice vote approval		Aug. 10, 1948
U.N. Loan. Authorized loan of \$65 million for building U.N. permanent headquarters in New York City.		164	27	No record vote		Aug. 11, 1948

How a Bill Becomes a Law

According to the Constitution, "All bills for raising revenue shall originate in the House of Representatives; but the Senate may propose or concur with amendments as on other bills." All other bills may originate in either house of Congress.

When a Senator or a Representative introduces a bill, he sends it to the clerk of his house, who gives it a number and title. This is the *first reading*, and the bill is referred to the proper committee.

The committee may decide the bill is unwise or unnecessary and *table* it, thus killing it at once. Or it may decide the bill is worthwhile and hold hearings to listen to facts and opinions presented by experts and other interested persons. After members of the committee have debated the bill and perhaps offered amendments, a vote is taken; and if the vote is favorable, the bill is sent back to the floor of the house.

The clerk reads the bill sentence by sentence to the house, and this is known as the *second reading*. Members may then debate the bill and offer amendments. In the House of Representatives, the time for debate is limited by a *cloture rule*, but there is no such restriction in the Senate except by a two-thirds vote for cloture. This makes possible a *filibuster*, in which one or more opponents hold the floor in an attempt to "talk the bill to death."

The *third reading* is by title only, and the bill is put to a vote, which may be by voice or roll call, depending on the circumstances and parliamentary rules. Members who must be absent at the time but who

wish to record their vote may be paired if each negative vote has a balancing affirmative one, and this fact must be properly recorded in advance.

The bill then goes to the other house of Congress, where it may be defeated, or passed with or without amendments. If the bill is defeated, it dies. If it is passed with amendments, a joint Congressional committee must be appointed by both houses to iron out the differences. When that is accomplished, the bill must be passed again by both houses in the same order as before.

After its final passage by both houses, the bill is sent to the President. If he approves, he signs it, and the bill becomes a law. However, if he disapproves, he *veto*s the bill by refusing to sign it and sending it back to the house of origin with his reasons for the veto. The objections are read and debated, and a roll-call vote is taken. If the bill receives less than a two-thirds vote, it is defeated and goes no farther. But if it receives a two-thirds vote or greater, it is sent to the other house for a vote. If that house also passes it by a two-thirds vote, the President's veto is *overridden*, and the bill becomes a law.

Should the President desire neither to sign nor to veto the bill, he may retain it for ten days, Sundays excepted, after which time it automatically becomes a law without signature. However, if Congress has adjourned within those ten days, the bill is automatically killed, that process of indirect rejection being known as a *pocket veto*. The pocket veto was declared constitutional by the Supreme Court in 1929.

THE UNITED STATES ARMED SERVICES

THE UNITED STATES MILITARY ACADEMY

Source: U. S. Military Academy.

The U. S. Military Academy opened on July 4, 1802 with less than a dozen cadets. In 1812, 250 cadets were appointed, and a regular curriculum was established.

The present 2500 cadets include:

- 4 from each Congressional district
- 8 from each State at large
- 4 each from Hawaii and Alaska
- 6 from the District of Columbia
- 4 natives from Puerto Rico
- 2 from the Panama Canal Zone
- 3 recommended by the Vice President
- 40 graduates of "honor military schools"
- 40 sons of veterans of World Wars I or II who died as a result of war service
- 89 sons of members of the Regular Army, Navy or Marine Corps
- 180 from the Regular Army and National Guard
- 4 from the Republic of the Philippines

All appointments are made by the President upon recommendation of the respective nominating authorities.

Candidates must be between the ages of 17 and 22, unmarried, and able to meet the mental, physical and physical aptitude requirements. They may satisfy the educational requirements by taking the regular entrance examinations, by presenting acceptable secondary school certificates and passing special examinations in English and mathematics, or by presenting certificates showing completion of at least one semester of acceptable college work.

A cadet receives \$936 for each of his four years at the Military Academy. Upon graduation with a degree of Bachelor of Science, he is commissioned as a second lieutenant and must serve for at least four years.

THE UNITED STATES NAVAL ACADEMY

Source: U. S. Naval Academy.

On October 10, 1845, the Naval School was established at Fort Severn, Annapolis, Maryland. Five years later it was renamed the United States Naval Academy, and the following year a regular four-year course was adopted. At present, the curriculum consists of courses in the following departments; executive; seamanship and navigation; ordnance and gunnery; marine engineering; aviation; electrical engineering; mathematics; English, history and government; foreign languages; hygiene; and physical training.

Candidates are selected as follows:

- 5 from the District of Columbia
- 40 sons of men and women killed in action or who have died, or may hereafter die of wounds or injuries, or

disease contracted, in active service in World Wars I and II

- 75 annually from among sons of officers and enlisted men in the regular Army, Navy, Marine Corps and Air Force
- 160 enlisted Navy and Marine personnel selected annually by competitive examination
- 160 annually chosen by the Secretary of the Navy from the Naval and Marine Corps Reserves
- 5 Puerto Ricans chosen by the Resident Commissioner of Puerto Rico
- 1 on the recommendation of the Governor of Puerto Rico
- 4 Filipinos designated by the President of the United States
- 1 from the Canal Zone
- 20 annually from schools designated by the Army and Navy as honor schools and from NROTC schools.
- 20 from the American republics and the Dominion of Canada
- Unlimited: Sons of persons who have been or shall hereafter be awarded the Congressional Medal of Honor.

Each Senator, Representative, delegate to Congress, and the Vice President may have not more than 5 Midshipmen at the Naval Academy. The President selects the 5 from the District of Columbia, the 40 sons of deceased veterans of World Wars and the 75 sons of officers and enlisted men in the regular Army, Navy, Marine Corps and Air Force. The President also appoints the sons of holders of the Medal of Honor.

Candidates for admission must be between 17 and 21 years of age on April 1 of their entering year, except that the upper age limit may be raised to 23 years for candidates who have served honorably not less than one year in the Armed Forces of the U. S. during any of the present wars. They may qualify by taking entrance examination, by presenting an acceptable secondary school certificate and taking special examinations in English and mathematics, or by completing a sufficient number of acceptable college courses. Candidates must also meet the physical requirements and must be unmarried.

Midshipmen are paid \$936 a year. Graduates of the Naval Academy are granted Bachelor of Science degrees and are commissioned as ensigns in the Navy or second lieutenants in the Marine Corps.

THE U. S. COAST GUARD ACADEMY

Source: Our Coast Guard Academy, Riley Hughes.

On July 31, 1876, the Coast Guard Academy, then known as the "School of Instruction" of the Revenue Cutter Service, was established by law.

The schooner J. C. DOBBIN was first

used as a school ship, later being succeeded in 1878 by the CHASE. In 1890 the CHASE established winter quarters at Curtis Bay, South Baltimore, Maryland, and in 1907 was superseded by the ITASCA. In 1910 the School was moved to New London. In 1914, the school was named the Revenue Cutter Academy. The following year, when the Revenue Cutter Service was merged with the Life Saving Service to form the Coast Guard, the present name of Coast Guard Academy was established. In 1932, the Coast Guard Academy was moved from Fort Trumbull to another site in New London, where it has remained to this day.

The Academy is accredited by the Association of American Universities and grants the degree of Bachelor of Science in Marine Engineering to each graduate. The curriculum includes mathematics, physics, marine engineering, seamanship, navigation, history, literature, naval architecture, and other engineering courses.

Candidates must be between 17 and 22 years of age, physically sound, unmarried, and at least 5'6" tall. They must agree to remain unmarried until graduation and to serve at least 3 years after graduation. Cadets are paid \$936 a year and are commissioned as ensigns in the Coast Guard upon graduation.

U. S. MERCHANT MARINE ACADEMY

Source: U. S. Maritime Commission.

The U. S. Merchant Marine Cadet Corps was established on March 15, 1938. Appointments are made on the basis of competitive examinations and a physical examination. Successful candidates, appointed as Midshipmen in the U. S. Naval Reserve, are assigned to the U. S. Merchant Marine Academy at Kings Point, New York, or to the U. S. Merchant Marine Cadet School, Pass Christian, Mississippi, as Fourth Classmen. They may choose courses to become

U. S. Army Insignia, Grade, Pay, and Allowances for Officers

Source: Department of the Army Public Information Division.

Insignia	Grade	Annual base pay	Allowances			
			Monthly rental		Monthly subsistence	
			with dependents	with no dependents	with dependents	with no dependents
Five stars	General of the Army	\$8,800 ¹	\$120	\$105	\$42	\$21
Four stars	General	8,800 ²	120	105	42	21
Three stars	Lieutenant General	8,800 ³	120	105	42	21
Two stars	Major General	8,800	120	105	42	21
One star	Brigadier General	6,600	120	105	42	21
Silver eagle	Colonel	4,400	120	105	42	21
Silver maple leaf	Lieutenant Colonel	3,850	120	105	63	21
Gold maple leaf	Major	3,300	105	90	63	21
Two silver bars	Captain	2,760	90	75	42	21
One silver bar	First Lieutenant	2,400	75	60	42	21
One gold bar	Second Lieutenant	2,160	60	45	42	21
Gold bar with rounded ends, brown enamel top, longitudinal center of gold (3/4" wide x 1" long)	Chief Warrant Officer (appointed by the Secretary of War)	3,300	105	90	63	21
Same	Same	2,760	90	75	42	21
Same	Chief Warrant Officer	2,520	75	60	42	21
Same as chief warrant officer but with latitudinal center of gold	Warrant Officer (Junior Grade)	2,160	60	45	42	21

¹Plus a personal money allowance of \$5,000 per year. ²Plus a personal money allowance of \$2,200 per year. ³Plus a personal money allowance of \$500 per year.

Longevity Allowances: General officers serving in the grade of Brigadier General and above do not receive longevity allowances. All other officers and enlisted men are entitled to an increase of 5 per centum of the base pay of their period for each three years of service up to 30 years.

Foreign Service or Sea Duty: The base pay of any commissioned officer shall be increased by 10 per centum for any period of service while on sea duty or duty in any place beyond the continental limits of the United States or in Alaska. Warrant officers and enlisted men receive an increase of 20 per centum.

Flying Pay: Officers and enlisted men shall receive an increase of 50 per centum of their pay when by orders of competent authority they are required to participate regularly and frequently in aerial flights.

Women's Army Corps: The pay of officers and enlisted women is the same as that for male officers and enlisted men of the Army of the United States in comparable grades.

either deck or engineer officers. Upon completion of a plebe year, they are assigned to merchant ships as Third Classmen for a year of practical training. The last two years of the course are spent as Second and First Classmen at the U. S. Merchant Marine Academy at Kings Point, New York. The course includes marine engineering, navigation, electricity, ship construction, naval science and tactics, economics, business, language, history, and other subjects.

A candidate must be an unmarried citizen between the ages of 17 and 21, with exceptions granted to veterans. He must

have 15 high-school credits, including 1 unit in algebra, 1 in plane geometry, 1 in physics, and 3 in English.

A candidate is paid \$780 each year by the government except for his Third Class year, when the shipping company pays him \$990 per year. Graduates receive a license as deck or engineer officer in the Merchant Marine, a commission as ensign in the U. S. Naval Reserve and a commission as Ensign, U. S. Maritime Service. The degree of Bachelor of Science will be awarded upon accreditation by the Association of American Universities.

U. S. Army Insignia, Grade, and Pay for Enlisted Men

Source: Department of the Army Public Information Division.

Insignia	Grade	Monthly base pay	Insignia	Grade	Monthly base pay
	1st Grade			4th Grade	
3 chevrons and an arc of 3 bars	Master Sergeant	\$165	2 chevrons	Corporal	100
3 chevrons and an arc of 3 bars with hollow lozenge on blue field between 3 chevrons and an arc of 3 bars below	First Sergeant	165		5th Grade	
	2d Grade		1 chevron	Private First Class	90
				6th Grade	
3 chevrons and an arc of 2 bars	Sergeant First Class	135	No insignia	Private	80
	3d Grade			7th Grade	
3 chevrons and an arc of 1 bar	Sergeant	115	No insignia	Recruit	75

Note: Effective in July, 1948, smaller grade chevrons for noncommissioned officers, providing distinction between "combat" and "non-combat" personnel, were put into effect. Men in combat jobs wear chevrons of dark blue on a gold-colored embroidered background, and non-combat soldiers wear insignia of gold on a dark-blue background. In addition to the distinction of color between the chevrons of combat and non-combat men, those noncommissioned officers designated as combat leaders—such as squad sergeants and platoon sergeants—wear a green cloth tab, one inch wide, on the middle of each shoulder loop, which will be relinquished when the individual vacates his "combat command" position, though he may or may not retain his combat chevrons.

The wartime differentiation between "technician" and "line" ratings has been eliminated.

U. S. Army and Navy Personnel, 1934-46

Source: Bureau of Labor Statistics.

Year	Branch		Sex		Total
	Army	Navy	Men	Women	
1934	140,000	119,000	...	...	258,000
1935	145,000	122,000	...	...	267,000
1936	168,000	131,000	...	...	299,000
1937	181,000	140,000	...	...	320,000
1938	188,000	146,000	...	...	334,000
1939	213,000	154,000	...	...	367,000
1940	325,000	208,000	...	...	533,000
1941	1,291,000	853,000	1,639,000	5,000	1,644,000
1942	3,071,000	897,000	3,952,000	16,000	3,968,000
1943	6,733,000	2,211,000	8,833,000	111,000	8,944,000
1944	7,889,000	3,483,000	11,162,000	211,000	11,372,000
1945	7,734,000	3,874,000	11,350,000	258,000	11,608,000
1946	2,291,000	1,460,000	3,675,000	76,000	3,751,000

U. S. Navy Grade, Classification and Monthly Pay for Enlisted Men

Grade	Classification	Abbreviation	Base pay
1	Chief Petty Officer.....	CPO	\$165
1	Chief Steward.....	SDC	165
1-A	Chief Petty Officer (Acting appointment).....	CP0A	150
1-A	Chief Steward (Acting appointment).....	SDCA	150
2	Petty Officer, first class.....	PO1	135
2	Steward, first class.....	SD1	135
3	Petty Officer, second class.....	PO2	120
3	Steward, second class.....	SD2	120
4	Petty Officer, third class.....	PO3	100
4	Steward, third class.....	SD3	100
5	Seaman.....	SN	90
5	Fireman.....	FN	90
5	Airman.....	AN	90
5	Construction man.....	CN	90
5	Hospitalman.....	HN	90
5	Dentalman.....	DN	90
5	Stewardsman.....	TN	90
6	Seaman Apprentice.....	SA	80
6	Fireman Apprentice.....	FA	80
6	Airman Apprentice.....	AA	80
6	Construction Apprentice.....	CA	80
6	Hospital Apprentice.....	HA	80
6	Dental Apprentice.....	DA	80
6	Steward Apprentice.....	TA	80
7	Seaman Recruit.....	SR	75
7	Fireman Recruit.....	FR	75
7	Airman Recruit.....	AR	75
7	Construction Recruit.....	CR	75
7	Hospital Recruit.....	HR	75
7	Dental Recruit.....	DR	75
7	Steward Recruit.....	TR	75

U. S. Navy Insignia, Grade, Pay, and Allowances for Officers

Insignia	Grade	Pay period	Monthly base pay	Monthly rental allowance		Monthly subsistence allowance	
				With dependents ¹	With no dependents ¹	With dependents ²	With no dependents ²
Five Stars	Fleet Admiral		\$733.33 ³	\$120	\$105	\$42	\$21
Four Stars	Admiral		733.33 ⁴	120	105	42	21
Three Stars	Vice Admiral		733.33 ⁵	120	105	42	21
Two Stars	Rear Admiral (upper half)		733.33	120	105	42	21
Two Stars	Rear Admiral (lower half)		550.00	120	105	42	21
One Star	Commodore	6	366.67	120	105	42	21
Silver Eagle	Captain	6	366.67	120	105	42	21
Silver Maple Leaf	Commander (over 30 yr. service)	6	366.67	120	105	42	21
Silver Maple Leaf	Commander (under 30 yr. service)	5	320.83	120	105	63	21
Gold Maple Leaf	Lt. Comdr. (over 23 yr. service)	5	320.83	120	105	63	21
Gold Maple Leaf	Lt. Comdr. (under 23 yr. service)	4	275.00	105	90	63	21
Two Silver Bars	Lieutenant (over 17 yr. service)	4	275.00	105	90	63	21
Two Silver Bars	Lieutenant (under 17 yr. service)	3	230.00	90	75	42	21
One Silver Bar	Lieutenant (jg)						
	(over 10 yr. service)	3	230.00	90	75	42	21
One Silver Bar	Lieutenant (jg)						
	(under 10 yr. service)	2	200.00	75	60	42	21
One Gold Bar	Ensign (over 5 yr. service)	2	200.00	75	60	42	21
One Gold Bar	Ensign						
	(under 5 yr. service)	1	180.00	60	45	42	21
Warrant specialty in Silver	C. W. O. ⁶						
	(over 20 yr. service)	4	275.00	105	90	63	21
Warrant specialty in Silver	C. W. O. ⁶						
	(over 10 yr. service)	3	230.00	90	75	42	21
Warrant specialty in Silver	C. W. O. ⁶						
	(under 10 yr. service) ⁷		210.00	75	60	42	21
Warrant specialty in Gold	Warrant Officer	1	180.00	60	45	42	21

See footnotes on opposite page.

British World War II Casualties

Country	Killed	Missing	Wounded	Prisoners of war	Total
United Kingdom*	244,723	53,039	277,090	180,405	755,257
Australia	23,365	6,030	39,803	26,363	95,561
Canada	37,476	1,843	53,174	9,045	101,538
India	24,338	11,754	64,354	79,489	179,935
New Zealand	10,033	2,129	19,314	8,453	39,929
U. of So. Africa	6,840	1,841	14,363	14,589	37,633
Colonies	6,877	14,208	6,972	8,115	36,172
Total	353,652	90,844	475,070	326,459	1,246,025

*Civilian casualties amounted to 60,585 killed; 86,175 injured and detained in hospitals.

Selective Service

The Selective Service Act, passed by Congress on June 19, 1948, and signed by President Truman on June 24, provided for the registration of all men from the ages of 18 through 25. It authorized induction for 21 months of enough 19 through 25-year-old men to maintain an armed force strength of 2,005,882 (Army 837,000, Navy and Marine Corps 666,882 and Air Force 502,000).

Up to 160,000 18-year-old men could escape the draft liabilities by volunteering for one-year service with the regular forces and then go into the unorganized Reserves for 6 years or the organized Reserves for 4 years.

Major General Lewis B. Hershey was re-appointed Director of Selective Service by

President Truman and he announced that it would take about 4,000 draft boards to handle the job as opposed to the 6,500 needed in World War II. On July 20, President Truman issued a proclamation ordering all men 18 through 25 to register in the period from August 30 to September 18, the oldest registering first. Actual inductions were started in Nov., 1948.

Authorizations of funds up to the period July 1, 1949 have allowed for an armed force strength of 1,958,882 of which the Army will have 790,000 (less than the anticipated 837,000) plus 110,000 18-year-old trainees, the Navy and Marine Corps 666,882 plus 26,000 trainees and the Air Force 502,000 plus 15,000.

Selective Service Classifications

I-A: Available for immediate service.

I-A-O: Conscientious objector available for non-combatant military service.

I-C: Members of the armed forces, Coast Guard, Coast and Geodetic Survey or Public Health Service or certain registrants separated therefrom.

I-D: Members of reserve components or student taking military training.

II-A: Registrant deferred because of civilian occupation (except agriculture).

II-C: Deferred because of agricultural occupation.

III-A: Registrant with dependents.

IV-A: Registrant who has completed service; sole surviving son of parents whose other child or children died in World War II.

IV-B: Officials deferred by law.

IV-C: Aliens.

IV-D: Ministers of religion or divinity students.

IV-E: Conscientious objectors opposed to combatant and non-combatant training and service.

IV-F: Physically, mentally or morally unfit.

¹An officer with dependents is not entitled to rental allowance under either of the following conditions: (a) while he is assigned public quarters and his dependents are not prevented by reason of orders of competent authority from dwelling with him; (b) while his dependents occupy public quarters. An officer without dependents is not entitled to rental allowance under any of the following conditions: (a) while he is on sea duty unless the sea duty is temporary duty not exceeding three months; (b) while he is on field duty unless his commanding officer certifies that he was necessarily required to procure quarters at his own expense; (c) while he occupies (or is assigned) public quarters.

²Subsistence allowance on this table is computed on the basis of a 30-day month. For a month of a greater or lesser number of days the amounts should be correspondingly increased or decreased.

³Personal cash allowance is \$416.67.

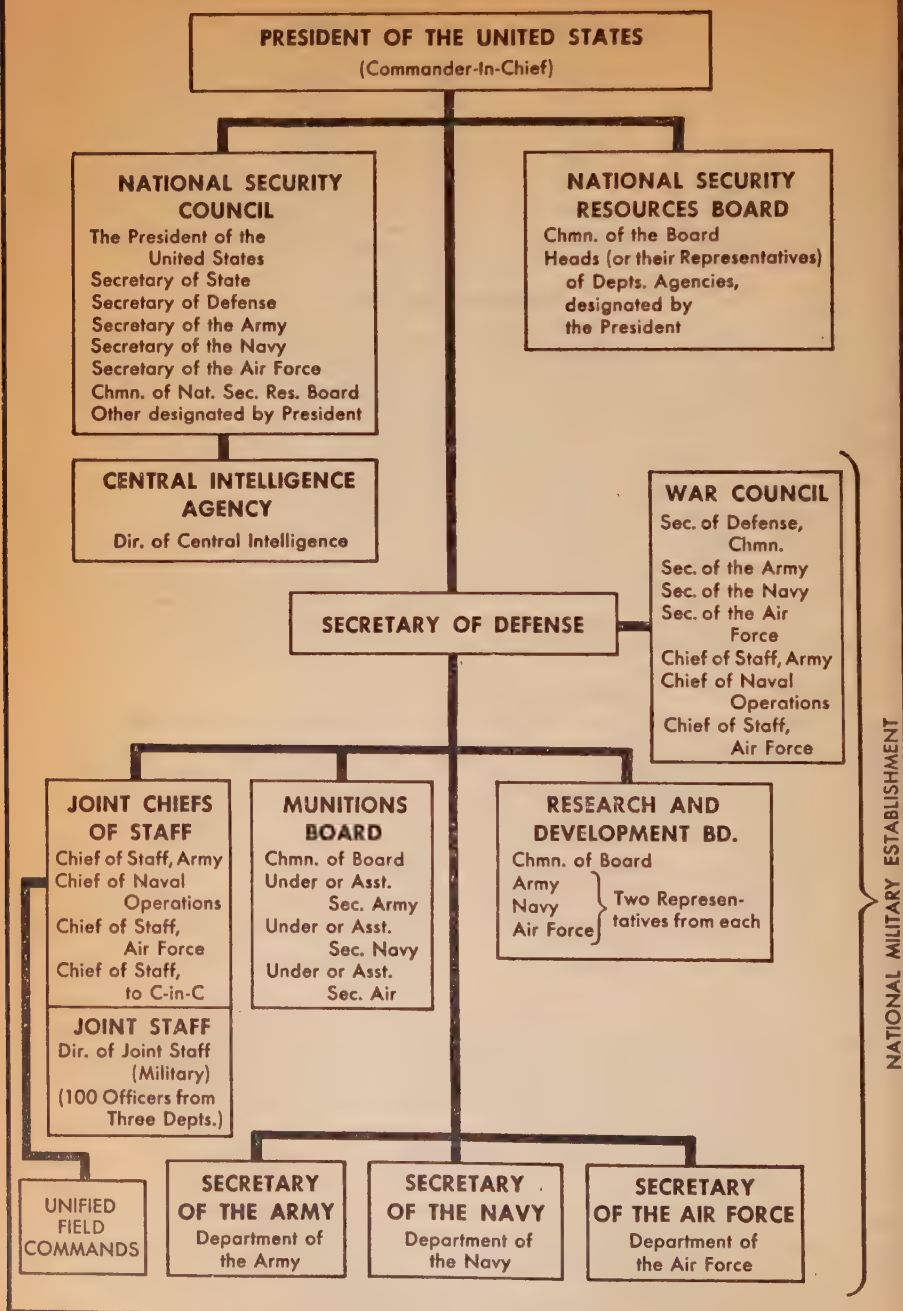
⁴Personal cash allowance is \$183.33.

⁵Personal cash allowance is \$41.67.

⁶A warrant officer promoted to commissioned warrant officer may be paid the pay provided for a warrant officer if greater than the pay of a commissioned warrant officer. When the total pay and allowances of a commissioned warrant officer shall exceed the rate of \$550.00 per month, the amount of the rental allowance to which such officer is entitled shall be reduced by the amount above \$550.00.

⁷Commissioned warrant officers during first 10 years of commissioned service are entitled to base pay at the rate of \$2520 per annum and the allowances of the second pay period; a certificate of creditable record is not required.

NATIONAL SECURITY ORGANIZATION



World Armed Forces, 1947

Source: *Encyclopaedia Britannica*.

Country	Number of men	Percent of budget for military	Number of civilians per soldier*	World rank on basis of number of men in the army
Afghanistan	100,000		120	19
Albania	60,000		17	23
Argentina	100,000	38	140	17
Australia	35,000	30	206	27
Belgium	85,000	10	99	20
Bolivia	30,000	30	118	29
Brazil	110,000	42	404	16
Bulgaria	60,000		109	21
Canada	25,000	12	460	30
Chile	25,000	19	209	31
China	5,750,000	80	91	1
Colombia	14,000	10	678	36
Cuba	15,000	18	320	35
Czechoslovakia	105,000	20	138	18
Denmark	14,000	14	271	37
Ecuador	10,000	20	808	41
Egypt	160,000		108	14
Eire	11,000	6	273	38
Finland	34,000		114	28
France	430,000	32	93	7
Great Britain	650,000	28	72	5
Greece	145,000		49	15
Hungary	50,000		182	24
India	375,000		736	8
Italy	200,000		229	12
Mexico	50,000	22	412	25
Netherlands	175,000	26	51	13
New Zealand	11,000		145	39
Norway	15,000		193	34
Pakistan	250,000		460	10
Peru	25,000	21	280	32
Poland	250,000	25	179	11
Portugal	18,000		444	33
Rumania	45,000		349	26
South Africa	10,000		1,070	40
Spain	450,000	33	60	6
Sweden	60,000		109	22
Switzerland	10,000		426	42
Turkey	675,000	19	28	3
United States	670,000	34	209	4
U.S.S.R.	3,800,000	18	51	2
Uruguay	10,000		218	43
Venezuela	10,000	9	383	44
Yugoslavia	300,000	22	54	9

*Indicates the degree of mobilization, the lowest figures indicating the highest state of mobilization.

German and Italian Casualties

Theater	Battle dead	Permanently disabled	Captured	Total
Tunisia	19,600	19,000	130,000	168,600
Sicily	5,000	2,000	7,100	14,100
Italy	86,000	15,000	357,089	458,089
Western Front	263,000	49,000	7,614,794*	7,926,794
Total	373,600	85,000	8,108,983*	8,567,583

*Includes 3,404,949 disarmed enemy forces.

Japanese Eastern Losses

Theater	Battle dead	Permanently disabled	Captured	Total
Southern Pacific	684,000	69,000	19,806	772,806
Central Pacific	273,000	6,000	17,472	296,472
India-Burma	128,000	38,000	3,097	169,097
China	126,000	126,000	1,059	253,059
Aleutians	8,000	1,000	30	9,030
Total	1,219,000	240,000	41,464	1,500,464

COST OF WARS TO U. S. TAXPAYERS

Source: Treasury Department.

War	Date	Direct cost	Pensions	Interest	Total
Revolutionary War.....	1775 to 1783	\$74,555,642 ¹	\$70,000,000 ²	.....	\$144,555,642 ³
War of 1812.....	1812 to 1815	133,700,000 ²	46,218,390 ⁴	.....	179,918,390 ³
War with Mexico.....	1846 to 1847	166,000,000 ²	61,653,106 ⁴	.....	227,653,106 ³
Civil War.....	1861 to 1865				
U. S. Government.....		4,474,954,364 ⁵	8,126,561,152.	\$3,054,000,000 ⁶	15,655,515,516
Confederacy.....		2,099,768,707 ⁶	7		2,099,768,707 ⁶
Spanish-American War.....	1898.....	576,256,000	2,276,470,624 ⁴	49,815,000 ⁸	2,902,541,624
World War I.....	1917 to 1918	25,807,000,000 ⁹	6,391,000,000 ¹⁰	9,557,000,000 ¹¹	41,755,000,000
World War II.....	1941 to 1945	330,500,000,000 ¹²	4,128,608,870 ¹³	15,150,000,000 ¹³	349,778,608,870 ¹⁴
Total.....		363,832,234,713	21,100,512,142	27,810,815,000	412,743,561,855

¹Foreign loans, \$10,098,706; national and state war debts, \$64,456,936.

²Estimated.

³Incomplete figures; actual cost almost certainly much higher.

⁴As of Feb. 28, 1946.

⁵Including \$468,954,364 expended by the several states.

⁶Confederate Treasury figures for the period from February 1861 to October 1, 1864, only, expressed in Confederate currency, which depreciated by October 1, 1864, to a ratio with gold of 26 to 1. Does not include expenditures by the several states of the Confederacy.

⁷No estimate available of pensions paid to Confederate veterans by Southern states.

⁸As of 1925.

⁹Including \$88,000,000 of payments under the War Claims Act.

¹⁰Total cost of Veterans Administration to June 30, 1934.

¹¹To June 30, 1934.

¹²War expenditures from July 1, 1940, to June 30, 1945, \$281,500,000,000; estimated expenditures for fiscal year ending June 30, 1946, \$49,000,000,000.

¹³Includes estimated expenditures for fiscal year ending June 30, 1946.

¹⁴The total cost of World War II to all participants was estimated as of March 10, 1946, at \$1,352,000,000,000 (1 trillion 352 billion dollars). Source: Bank of International Settlements, as reported in the N. Y. Herald Tribune.

Important Conferences of World War II

1941—Atlantic Charter Conference (Aug. 9-10): Roosevelt, Churchill meet at sea; issue (Aug. 14) 8-point declaration of common principles.

1942—First U.N. Conference (Jan. 1): 26 nations promise to prosecute war fully and not conclude separate peace.

1943—Casablanca (Fr. Mor.) Conference (Jan. 14-26): Roosevelt, Churchill, De Gaulle, Giraud plan initiative in war; will accept only unconditional surrender. Washington (D.C.) Conference (May 11-27): Roosevelt, Churchill plan global warfare, invasion of France, Burmese campaign.

Quebec Conference (Aug. 10-24): Roosevelt, Churchill, King, Hull, Eden, plan Asiatic campaign.

Moscow Conference (Oct. 19-Nov. 1): Hull, Eden, Molotov recognize need for postwar international organization; promise to try war criminals; recognize China as one of Big Four; plan future of Austria, Italy.

Cairo Conference (Nov. 22-26): Roosevelt, Churchill, Chiang Kai-shek plan Japanese offensive; promise free Korea.

Teheran Conference (Nov. 28-Dec. 1): Roosevelt, Churchill, Stalin plan attack on Axis-held Europe.

1944—Dumbarton Oaks Conference (Aug. 21-Oct. 7): Representatives of U.S.S.R., Britain, China, U. S. meet on estate near Washington, D.C., to plan postwar United Nations organization.

Quebec Conference (Sept. 11-16): Roosevelt, Churchill plan Pacific war; advance invasion date of Philippines to Oct. 20, 1944.

1945—Yalta (Crimea) Conference (Feb. 4-11): Roosevelt, Churchill, Stalin plan occupation of Germany and new Polish frontiers; set date for United Nations meeting at San Francisco.

United Nations Conference (Apr. 25-June 26): Representatives of 46 (later 50) nations draw up and sign U.N. Charter in San Francisco.

Potsdam (or Berlin) Conference (July 17-Aug. 2): Truman, Churchill (replaced by Attlee July 28), Stalin establish council of foreign ministers to prepare peace treaties; plan postwar German government and reparations to be exacted.

Casualties of U. S. Wars for Army, Navy, and Marine Corps, 1775 to 1945

Source: U. S. Army, U. S. Navy, and U. S. Marine Corps.

Wars	Branch of service	Numbers engaged	Killed in action	Died of wounds	Other deaths	Total deaths	Missing	Wounds not mortal	Total casualties
Revolutionary War 1775 to 1783	Army	(1)	4,044 ²	.....	.....	4,044 ²	2,124	6,004	12,172
	Navy	.....	.....	.....	.....	.....	.....	.....	.....
	Marines	.....	.....	.....	.....	.....	.....	.....	.....
	Total....	.....	4,044	.....	.....	4,044	2,124	6,004	12,172
War of 1812 1812 to 1814	Army	528,274 ⁴	1,950 ²	.....	.....	1,950 ²	.....	4,000	5,950
	Navy	6,773	265	.....	.....	265	.....	439	704
	Marines	1,155	45	.....	.....	45	.....	66	111
	Total	536,202	2,260	.....	.....	2,260	.....	4,505	6,765
Mexican War 1846 to 1848	Army	116,597	1,044	505	11,395	12,944	.....	3,393	16,337
	Navy	11,129	1	.....	.....	1	.....	3	4
	Marines	2,270	11	.....	.....	11	.....	47	58
	Total	129,996	1,056	505	11,395	12,956	.....	3,443	16,399
Civil War 1861 to 1865	Army	2,128,948	67,058	43,012	249,458	359,528 ⁸	.....	280,040 ⁶	639,568
	Navy	57,841 ⁷	2,112	.....	2,411	4,523	.....	1,710	6,233
	Marines	3,255 ⁹	108	.....	272	380	40	131	551 ⁹
	Total	2,190,044	69,278	43,012	252,141	364,431	40	281,881	646,352
Spanish-American 1898	Army	280,564	498	202	5,772	6,472	.....	2,974	9,446
	Navy	22,875	10	.....	.....	10	.....	47	57
	Marines	3,321	6	.....	.....	6	.....	21	27 ⁹
	Total	306,760	514	202	5,772	6,488	.....	3,042	9,530
Military Expeditions ¹⁰ 1899 to 1916	Army	131,468 ¹¹	863	253	3,269	4,385	.....	3,007	7,392
	Navy	.....	.....	.....	.....	.....	.....	.....	.....
	Marines	.....	.....	.....	.....	.....	.....	.....	.....
	Total	131,468	863	253	3,269	4,385	.....	3,007	7,392
World War I 1917 to 1918	Army	4,057,101	37,568	12,942	69,446	119,956	.....	193,663 ¹²	313,619
	Navy	473,262 ¹³	59	.....	6,975	7,034	.....	292	7,326
	Marines	78,827	2,461	.....	823	3,284	.....	9,505	12,789
	Total	4,609,190	40,088	12,942	77,244	130,274	.....	203,460	333,734
World War II 1941 to 1945	Army	8,300,000	175,407	26,706	34,936	237,049	12,752	571,679	821,480
	Navy	4,204,662	34,625	.....	1,813	36,438	28	33,670	70,136
	Marines	599,693	17,099	.....	2,142	19,241	.....	67,134	86,375
	Total	13,104,355	227,131	26,706	38,891	292,728	12,780	672,483	977,991
Total War Casualties 1775 to 1945 (170 years)	Army	15,542,952	288,432	83,620	374,276	746,328	14,876	1,064,760	1,825,964
	Navy	4,776,542	37,072	.....	11,199	48,271	28	56,161	84,460
	Marines	688,521	19,730	.....	3,237	22,967	40	76,904	99,911
	Total	21,008,015	345,234	83,620	388,712	817,566	14,944	1,177,825	2,010,335

¹Greatest strength of Continental Army was about 35,000, November 1778.

²Includes killed in action, died of wounds, and other deaths.

³Total number undoubtedly much larger, since records were incomplete.

⁴Represents enlistments; hence in excess of actual number of troops since reenlistments were counted as a term of service.

⁵Actual deaths larger since records of Confederates far from complete.

⁶Estimated on Union records but number believed to be considerably larger.

⁷Based on highest total for year 1865.

⁸Excludes 999 Confederate Marines of which 527 were casualties.

⁹Excludes 28 killed on the U.S.S. Maine.

¹⁰Philippine Insurrection, 1899 to 1902; Cuban pacification, 1906 to 1909; China Relief Expedition, 1900 to 1901; Mexican Border, 1911 to 1916; Punitive Expedition, 1916.

¹¹Approximately. Includes National Guard in Federal Service during Mexican border incidents.

¹²Number incurred among 182,674 individuals, many having been wounded more than once.

¹³This figure includes those who served in the Nurse Corps of the U. S. Navy but does not include commissioned and warrant officers who were serving in the Regular Navy and Naval Reserve Force.

NOTE: The U. S. Coast Guard in World War II had 172,952 men engaged. There were 1,917 deaths reported, of which 560 were classified as killed in action, and 25 as died of wounds.

DECLARATIONS OF WAR

Address of the President of the United States before a joint session of the two Houses of Congress requesting that Congress declare that there exists a state of war between the United States and the Japanese Empire.

To the Congress of the United States:

Yesterday, December 7, 1941—a date which will live in infamy—the United States of America was suddenly and deliberately attacked by naval and air forces of the Empire of Japan.

The United States was at peace with that Nation and, at the solicitation of Japan, was still in conversation with its Government and its Emperor looking toward the maintenance of peace in the Pacific. Indeed, one hour after Japanese air squadrons had commenced bombing in Oahu, the Japanese Ambassador to the United States and his colleague delivered to the Secretary of State a formal reply to a recent American message. While this reply stated that it seemed useless to continue the existing diplomatic negotiations, it contained no threat or hint of war or armed attack.

It will be recorded that the distance of Hawaii from Japan makes it obvious that the attack was deliberately planned many days or even weeks ago. During the intervening time the Japanese Government has deliberately sought to deceive the United States by false statements and expressions of hope for continued peace.

The attack yesterday on the Hawaiian Islands has caused severe damage to American naval and military forces. Very many American lives have been lost. In addition, American ships have been reported torpedoed on the high seas between San Francisco and Honolulu.

Yesterday the Japanese Government also launched an attack against Malaya.

Last night the Japanese forces attacked Hong Kong.

Last night Japanese forces attacked Guam.

Last night Japanese forces attacked the Philippine Islands.

Last night the Japanese attacked Wake Island.

This morning the Japanese attacked Midway Island.

Japan has, therefore, undertaken a surprise offensive extending throughout the Pacific area. The facts of yesterday speak for themselves. The people of the United States have already formed their opinions and well understand the implications to the very life and safety of our Nation.

As Commander in Chief of the Army and Navy I have directed that all measures be taken for our defense.

Always will we remember the character of the onslaught against us.

No matter how long it may take us to overcome these premeditated invasions, the American people in their righteous might will win through to absolute victory.

I believe I interpret the will of the Congress and of the people when I assert that we will not only defend ourselves to the uttermost but will make very certain that this form of treachery shall never endanger us again.

Hostilities exist. There is no blinking at the fact that our people, our territory, and our interests are in grave danger.

With confidence in our armed forces—with the unbounded determination of our people—we will gain the inevitable triumph—so help us God.

I ask that the Congress declare that since the unprovoked and dastardly attack by Japan on Sunday, December 7, a state of war has existed between the United States and the Japanese Empire.

FRANKLIN D. ROOSEVELT

THE WHITE HOUSE
December 8, 1941.

Public Law 328—77th Congress

Joint Resolution

Declaring that a state of war exists between the Imperial Government of Japan and the Government and the people of the United States and making provisions to prosecute the same.

Whereas the Imperial Government of Japan has committed unprovoked acts of war against the Government and the people of the United States of America: Therefore be it

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the state of war between the United States and the Imperial Government of Japan which has thus been thrust upon the United States is hereby formally declared;

and the President is hereby authorized and directed to employ the entire naval and military forces of the United States and the resources of the Government to carry on war against the Imperial Government of Japan; and, to bring the conflict to a successful termination, all of the resources of the country are hereby pledged by the Congress of the United States.

Approved, December 8, 1941, 4:10 P.M.,
E. S. T.

Message from the President of the United States transmitting a request that the Congress recognize a state of war between the United States and Germany, and between the United States and Italy.

To the Congress of the United States:

On the morning of December eleventh, the Government of Germany, pursuing its course of world conquest, declared war against the United States.

The long known and the long expected has thus taken place. The forces endeavoring to enslave the entire world now are moving towards this hemisphere.

Never before has there been a greater challenge to life, liberty, and civilization.

Delay invites greater danger. Rapid and united effort by all of the peoples of the

world who are determined to remain free will ensure a world victory of the forces of justice and of righteousness over the forces of savagery and of barbarism.

Italy also has declared war against the United States.

I therefore request the Congress to recognize a state of war between the United States and Germany, and between the United States and Italy.

FRANKLIN D. ROOSEVELT

THE WHITE HOUSE

December 11, 1941.

Public Law 331—77th Congress

Joint Resolution

Declaring that a state of war exists between the Government of Germany and the Government and the people of the United States and making provision to prosecute the same.

Whereas the Government of Germany has formally declared war against the Government and the people of the United States of America: Therefore be it

Resolved by the Senate and the House of Representatives of the United States of America in Congress assembled, That the state of war between the United States and the Government of Germany which has thus been thrust upon the United States is hereby formally declared; and the President is hereby authorized and directed to employ the entire naval and military forces

of the United States and the resources of the Government to carry on war against the Government of Germany; and, to bring the conflict to a successful termination, all of the resources of the country are hereby pledged by the Congress of the United States.

Approved, December 11, 1941, 3:05 P.M., E. S. T.

In similar wording, war was declared against the Government of Italy by Joint Resolution, Public Law 332, approved December 11, 1941, 3:06 P.M.

Declarations of War, Invasions and Surrenders of World War II

1939 Sept. 1, Germany invades Poland.
Sept. 3, Great Britain and France declare war on Germany.
Nov. 30, Russia invades Finland.

1940 April 9, Germany invades Denmark and Norway.
May 10, Germany invades Holland, Belgium and Luxembourg.
May 16, Germany invades France.
June 10, Italy declares war on France and Great Britain.
Oct. 8, Germany invades Rumania.
Oct. 28, Italy invades Greece.

1941 April 6, Germany invades Yugoslavia and Greece.
June 22, Germany declares war on Russia.
Dec. 7, Japan bombs Pearl Harbor, declares war on U. S. and Gt. Brit.
Dec. 8, United States and Great Britain declare war against Japan.
Dec. 8, China declares war on Japan, Germany, and Italy.
Dec. 11, Germany and Italy declare war on the United States.

Dec. 11, United States declares war against Germany and Italy.

1942 May 22, Mexico declares war on Japan, Germany and Italy.
Aug. 22, Brazil declares war on Germany and Italy.

1943 April 7, Bolivia declares war against the Axis Powers.
Sept. 3, Allies invade Italy.
Sept. 8, Italy surrenders to the Allies.
Oct. 13, Italy (Badoglio government) declares war against Germany.

1944 June 6, D-Day—Allies invade the Channel Coast.
Sept. 13, Rumania signs armistice.
1945 Feb. 23, Turkey and Egypt declare war against Axis.
March 27, Argentina declares war on Germany.

May 2, German army in Italy surrenders to Allies.
May 8, Germany surrenders unconditionally to the Allies.
Aug. 8, Russia declares war on Japan.
Sept. 2, Japan signs surrender.

Record Passages of Atlantic (Screw) Steamships

Source: U. S. Maritime Commission, Aug. 22, 1946.

WESTWARD PASSAGES

EASTWARD PASSAGES

Date	Ship and (flag*)	To New York from	Time D. H. M.	Speed knots	Sea miles	Date	Ship and (flag*)	From New York to	Time D. H. M.	Speed knots	Sea miles
1867	CITY OF PARIS (B) (Time record only)	Queenstown	8 4 1	.....	.....	1852	GREAT BRITAIN (B)	Liverpool	11 0 0	.....	.....
1872	ADRIATIC (B)	"	7 23 17	14.52	.....	1869	CITY OF BRUSSELS† (B)	Queenstown	7 22 3	14.65	.....
1875	CITY OF BERLIN† (B)	"	7 18 2	15.2	.....	1873	BALTIC† (B)	"	7 20 9	15.11	.....
1875	GERMANIC (B)	"	7 11 37	15.75	.....	1875	CITY OF BERLIN† (B)	"	7 15 28	15.37	.....
1877	BRITANNIC (B)	"	7 10 53	15.46	.....	1876	GERMANIC† (B)	"	7 15 17	15.78	.....
1876	ALASKA† (B)	"	6 21 40	16.04	.....	1876	BRITANNIC† (B)	"	7 12 41	15.95	.....
1882	OREGON† (Guion) (B)	"	6 10 9	18.16	.....	1879	ARIZONA† (B)	"	7 8 0	15.95	.....
1884	OREGON† (Guion) (B)	"	6 9 42	18.91	.....	1882	ALASKA† (B)	"	6 18 37	16.88	.....
1884	UMBRIA (B)	"	6 4 34	19.57	.....	1883	OREGON (Guion) (B)	"	6 16 57	.....	.....
1885	ETRURIA† (B)	"	6 1 44	20.01	.....	1884	AMERICA (B)	"	6 14 8	17.8	.....
1888	CITY OF PARIS† (B)	"	5 14 24	20.17	.....	1884	OREGON† (Cunard) (B)	"	6 10 40	18.18	.....
1889	TEUTONIC† (B)	"	5 16 31	20.35	.....	1885	ETRURIA† (B)	"	6 4 54	19.41	.....
1891	MAJESTIC† (B)	"	5 18 8	20.11	.....	1888	UMBRIA (B)	"	6 3 12	.....	.....
1891	CAMPANIA (B)	"	5 9 6	20.41	.....	1889	CITY OF PARIS† (B)	"	5 22 50	19.49	.....
1893	LUCANIA† (B)	"	5 7 23	21.82	.....	1891	TEUTONIC (B)	"	5 21 3	19.78	.....
1894	KAISER WILHELM DER GROSSE† (G)	Southampton	5 15 20	22.07	.....	1892	CITY OF NEW YORK (B)	"	5 19 57	20.1	.....
1898	DEUTSCHLAND (G)	"	5 11 54	23.15	3,044	1894	LUCANIA† (B)	Southampton	5 8 38	.....	.....
1900	LUSITANIA† (B)	Queenstown	4 11 40	24.00	.....	1897	KAISER WILHELM DER GROSSE† (G)	Eddystone Lt.	5 15 25	22.51	.....
1901	MAURETANIA† (B)	"	4 10 41	25.88	.....	1898	DEUTSCHLAND† (G)	Plymouth	5 7 38	23.51	3,082
1907	BREMEN† (G)	Cherbourg	4 21 44	26.9	.....	1900	KAISER WILHELM II† (G)	Queenstown	5 8 16	23.58	.....
1908	EUROPAT† (G)	"	4 17 42	27.83	3,162	1901	LUSITANIA† (B)	"	4 15 50	25.57	.....
1909	REX† (I)	"	4 17 6	27.91	3,157	1907	MAURETANIA† (B)	Cherbourg	4 13 41	25.89	.....
1930	NORMANDIE† (F)	Gibraltar	4 13 58	28.92	3,181	1908	"	Plymouth	5 1 49	26.25	3,198
1935	QUEEN MARY† (B)	Bishop's Rock	4 3 2	29.98	3,015	1911	"	Queenstown	4 17 50	27.22	3,098
1936	QUEEN MARY† (B)	"	4 0 27	30.14	2,939	1924	BREMEN† (G)	Cherbourg	4 14 30	27.91	3,084
1938	QUEEN MARY† (B)	"	3 21 48	30.99	2,907	1929	NORMANDIE† (F)	Bishop's Rock	4 16 15	28.51	3,199
						1933	QUEEN MARY† (B)	"	4 3 25	30.35	.....
						1935			4 6	30.99	2,978
						1936			3 23 57	30.63	.....
						1938			3 20 42	31.69	2,938

* (B)—British; (G)—German; (I)—Italian; (F)—French. †Vessels which have held the Blue Ribband.

UNITED STATES STATISTICS

Geographic Data

Source: U. S. Coast and Geodetic Survey.

Highest point: Mt. Whitney, Calif.*	14,495 ft.
Lowest point: Death Valley, Calif.*	275 ft. below sea level
Most northern point: Lake of the Woods projection, Minn.	49° 23' N. lat.
Most southern point: Cape Sable, Fla.	25° 07' N. lat.
Most eastern point: West Quoddy Head, Maine	66° 57' W. long.
Most western point: Cape Alava, Wash.	124° 44' W. long.
Places farthest apart: Cape Flattery, Wash., to a point on the Florida coast south of Miami	2,835 mi.
Geographic center: near Lebanon, Smith County, Kans.	{ 39° 50' N. lat. 98° 35' W. long.
Northern boundary: Canada and Great Lakes	3,987 mi.
Southern boundary: Gulf of Mexico and Mexican boundary	5,654 mi.
Eastern boundary: Atlantic tidal coastline	5,565 mi.
Western boundary: Pacific tidal coastline	2,730 mi.
Total U. S. boundary	17,936 mi.

*The highest and lowest points in the U. S. are 86 mi. apart.

Territorial Expansion of the United States

Accession	Date	Area, sq. mi. ¹
CONTINENTAL UNITED STATES		
Territory in 1790 ²		888,811
Louisiana Purchase	1803	827,192
Florida	1819	58,560
By treaty with Spain	1819	13,443
Texas	1845	390,144
Oregon	1846	285,580
Mexican Cession	1848	529,017
Gadsden Purchase	1853	29,640
Total		3,022,387

OUTLYING TERRITORY³

Alaska Territory	1867	586,400
Hawaii Territory ⁴	1898	6,454
Puerto Rico	1899	3,435
Guam	1899	206
American Samoa	1900	76
Panama Canal Zone	1904	553
Virgin Islands of U. S.	1917	133
Trust territory ⁵	1947	846
Total		598,103
Aggregate (1947)		3,620,490

¹Total land and water area.

²Includes drainage basin of Red River of the North, not part of any accession, but in the past sometimes considered a part of the Louisiana Purchase.

³The Philippine Islands, acquired in 1899, became independent on July 4, 1946.

⁴Includes Baker, Canton, Enderbury, Howland, Jarvis, Johnston, and Midway Islands; also certain other outlying islands (21 sq. mi.).

⁵Consists of the Marianas, Caroline, and Marshall Islands, formerly held by Japan under mandate.

Sources: U. S. Bureau of the Census.

Water Area under U. S. Jurisdiction

	Sq. mi.
Atlantic Ocean	2,298
Chesapeake Bay	3,237
Delaware Bay	665
Erie, Lake	5,002
Georgia and Juan de Fuca, Straits of	1,610
Huron, Lake	8,975
Long Island Sound	1,299
Mexico, Gulf of	3,837
Michigan, Lake	22,178
New York Harbor	92
Ontario, Lake	3,033
Pacific Ocean	343
Puget Sound	561
St. Clair, Lake	116
Superior, Lake	21,118
Total	74,364*

*Not included in official area of U. S. because the water actually belongs to no particular country.

Continental Population and Area

Census	Population	Increase over the preceding census		Land area sq. mi.	Pop. per sq. mi.
		Number	Percent		
1790...	3,929,214			867,980	4.5
1800...	5,308,483	1,379,269	35.1	867,980	6.1
1810...	7,239,881	1,931,398	36.4	1,685,865	4.3
1820...	9,638,453	2,398,572	33.1	1,753,588	5.5
1830...	12,866,020	3,227,567	33.5	1,753,588	7.3
1840...	17,069,453	4,203,433	32.7	1,753,588	9.7
1850...	23,191,876	6,122,423	35.9	2,944,337	7.9
1860...	31,443,321	8,251,445	35.6	2,973,965	10.6
1870...	39,818,449	8,375,128	26.6	2,973,965	13.4
1880...	50,155,783	10,337,334	26.0	2,973,965	16.9
1890...	62,947,714	12,791,931	25.5	2,973,965	21.2
1900...	75,994,575	13,046,861	20.7	2,974,159	25.6
1910...	91,972,266	15,977,691	21.0	2,973,890	30.9
1920...	105,710,620	13,738,354	14.9	2,973,776	35.5
1930...	122,775,046	17,064,426	16.1	2,977,128	41.2
1940...	131,669,275	8,894,229	7.2	2,977,128	44.2

Climate of Selected U. S. Cities

Source: U. S. Weather Bureau.

State and city	Average mean temperature, F			Average annual precipitation, inches	Average annual snowfall, inches	Average annual % possible sunshine	Average annual relative humidity
	Jan.	July	Annual				
Alabama: Mobile.....	52.0	81.8	67.5	61.76	.2	62	72
Montgomery.....	48.9	81.7	65.8	51.33	.7	64	67
Arizona: Phoenix.....	52.0	90.4	70.3	7.85	Trace	84	38
Arkansas: Little Rock.....	42.0	81.2	62.2	47.52	4.7	63	66
California: Fresno.....	46.2	82.1	63.3	9.50	.1	80	52
Los Angeles.....	55.5	70.5	63.0	15.54	Trace	72	62
San Francisco.....	50.1	58.9	56.5	22.18	.2	66	73
Colorado: Denver.....	30.6	72.5	50.4	14.01	54.9	67	48
D. C.: Washington.....	35.0	77.2	55.8	41.11	20.2	58	67
Florida: Jacksonville.....	55.4	82.1	69.3	49.75	0.0	63	73
Miami.....	67.7	81.8	75.2	58.96	0.0	66	73
Georgia: Atlanta.....	42.5	79.1	61.4	49.75	2.3	62	69
Idaho: Boise.....	28.7	74.4	51.0	12.66	15.0	62	59
Illinois: Chicago.....	24.9	73.3	49.5	32.81	33.4	58	69
Indiana: Indianapolis.....	28.4	75.7	53.0	39.90	20.8	57	66
Iowa: Des Moines.....	20.1	75.4	49.5	32.04	31.9	62	71
Kansas: Wichita.....	32.1	80.1	56.6	30.26	13.7	68	62
Kentucky: Louisville.....	34.8	78.6	57.0	42.49	13.5	58	65
Louisiana: New Orleans.....	54.8	82.6	69.6	59.81	.3	59	72
Maine: Eastport.....	20.9	60.4	41.8	38.82	69.5	50	77
Massachusetts: Boston.....	27.9	71.7	49.6	40.14	43.1	57	68
Michigan: Detroit.....	24.9	72.7	48.6	31.53	40.8	52	71
Sault Ste. Marie.....	12.1	62.7	38.0	29.94	79.3	48	77
Minnesota: Minneapolis.....	12.7	72.3	44.5	27.66	40.9	57	64
Mississippi: Vicksburg.....	48.2	81.3	65.6	51.93	1.6	62	73
Missouri: Kansas City.....	29.9	79.3	55.3	36.32	21.4	64	66
St. Louis.....	31.1	78.8	56.2	38.98	17.7	59	64
Montana: Helena.....	18.7	65.7	41.5	11.55	54.6	58	56
Miles City.....	17.1	74.3	45.9	13.79	32.2	63	61
Nebraska: North Platte.....	23.9	75.0	49.5	18.13	24.8	69	62
Omaha.....	22.2	77.5	51.1	27.72	28.0	62	67
Nevada: Winnemucca.....	28.1	71.9	48.8	8.56	27.7	72	52
New Jersey: Atlantic City.....	32.5	72.1	52.3	40.56	15.4	60	75
New Mexico: Albuquerque.....	34.1	76.7	55.3	8.01	7.3	77	47
New York: Albany.....	23.6	72.4	48.3	36.92	49.6	53	72
New York.....	30.9	73.8	52.3	42.99	31.6	60	65
Rochester.....	24.9	71.3	47.7	32.76	75.7	50	68
North Carolina: Asheville.....	35.4	71.7	54.1	40.28	10.3	57	68
Raleigh.....	41.1	78.8	60.1	46.26	7.7	61	72
North Dakota: Bismarck.....	6.3	69.4	39.1	16.34	34.5	58	66
Ohio: Cleveland.....	24.7	71.9	48.7	33.82	41.4	51	61
Oklahoma: Oklahoma City.....	37.5	81.3	60.1	31.65	7.6	67	66
Oregon: Portland.....	39.4	66.7	53.1	41.62	12.9	48	70
Pennsylvania: Harrisburg.....	29.0	74.8	52.1	37.94	31.9	57	64
Pittsburgh.....	30.9	74.4	52.5	36.53	33.8	50	67
South Carolina: Charleston.....	50.1	81.4	66.0	45.22	.3	66	72
South Dakota: Huron.....	11.3	71.8	43.6	20.65	28.2	63	66
Tennessee: Nashville.....	39.2	79.4	59.6	46.11	8.0	59	69
Texas: Amarillo.....	33.1	75.9	54.6	20.99	20.1	77	55
El Paso.....	43.6	79.7	62.1	9.17	2.3	80	38
Fort Worth.....	46.2	83.9	65.6	31.87	2.4	67	63
Houston.....	53.5	83.2	69.2	45.95	.2	60	73
Utah: Salt Lake City.....	26.0	76.8	50.9	13.45	46.7	69	57
Vermont: Burlington.....	18.8	70.3	45.1	31.61	65.8	46	77
Virginia: Norfolk.....	41.6	78.5	59.7	45.25	9.1	61	73
Richmond.....	37.9	78.5	57.5	42.02	13.0	60	68
Washington: Seattle.....	40.5	64.3	52.0	33.28	11.6	46	73
Spokane.....	27.4	70.4	48.6	15.79	35.8	58	60
West Virginia: Parkersburg.....	33.4	75.4	54.3	39.41	24.5	47	72
Wisconsin: Madison.....	17.5	72.5	46.1	31.15	37.7	53	71
Wyoming: Cheyenne.....	25.5	66.7	44.6	14.99	56.7	66	53

Highest, Lowest, and Average Altitudes in the United States

Source: U. S. Geological Survey.

State	Average elevation, ft.	Highest point	Elevation, ft.	Lowest point	Elevation, ft.
Alabama	500	Cheaha Mountain	2,407	Gulf of Mexico	Sea level
Arizona	4,100	Humphreys Peak	12,611	Colorado River	100
Arkansas	650	Blue Mountain	2,800	Ouachita River	55
California	2,900	Mount Whitney	14,495	Death Valley	275*
Colorado	6,800	Mount Elbert	14,431	Arkansas River	3,350
Connecticut	500	Bear Mountain	2,355	Long Island Sound	Sea level
Delaware	60	Centerville	440	Atlantic Ocean	Sea level
D.C.	150	Tenleytown	420	Potomac River	Sea level
Florida	100	Iron Mountain	325	Atlantic Ocean	Sea level
Georgia	600	Brasstown Bald	4,768	Atlantic Ocean	Sea level
Idaho	5,000	Borah Peak	12,655	Snake River	720
Illinois	600	Charles Mound	1,241	Mississippi River	279
Indiana	700	Greensfork Township	1,240	Ohio River	316
Iowa	1,100	North boundary	1,675	Mississippi River	477
Kansas	2,000	On west boundary	4,135	Verdigris River	700
Kentucky	750	Big Black Mountain	4,150	Mississippi River	257
Louisiana	100	Benchmark at Athens (old)	469	New Orleans	5*
Maine	600	Mount Katahdin	5,268	Atlantic Ocean	Sea level
Maryland	350	Backbone Mountain	3,340	Atlantic Ocean	Sea level
Massachusetts	500	Mount Greylock	3,491	Atlantic Ocean	Sea level
Michigan	900	Porcupine Mountains	2,023	Lake Erie	572
Minnesota	1,200	Misquah Hills	2,230	Lake Superior	602
Mississippi	300	Near Iuka, Knob triangulation station	806	Gulf of Mexico	Sea level
Missouri	800	Taum Sauk Mountain	1,772	St. Francis River	230
Montana	3,400	Granite Peak	12,850	Kootenai River	1,800
Nebraska	2,600	Southwest part of state	5,300	Southeast corner of State	825
Nevada	5,500	Boundary Peak, White Mountains	13,145	Colorado River	470
New Hampshire	1,000	Mount Washington	6,288	Atlantic Ocean	Sea level
New Jersey	250	High Point	1,801	Atlantic Ocean	Sea level
New Mexico	5,700	North Truchas Peak	13,306	Red Bluff Reservoir	2,817
New York	1,000	Mount Marcy	5,344	Atlantic Ocean	Sea level
North Carolina	700	Mount Mitchell	6,684	Atlantic Ocean	Sea level
North Dakota	1,900	Black Butte	3,468	Pembina	790
Ohio	850	Campbell Hill	1,550	Ohio River	425
Oklahoma	1,300	Black Mesa	4,978	Red River	300
Oregon	3,300	Mount Hood	11,253	Pacific Ocean	Sea level
Pennsylvania	1,100	Negro Mountain	3,213	Delaware River	Sea level
Rhode Island	200	Jerimoth Hill	812	Atlantic Ocean	Sea level
South Carolina	350	Sassafras Mountain	3,548	Atlantic Ocean	Sea level
South Dakota	2,200	Harney Peak	7,242	Big Stone Lake	962
Tennessee	900	Clingmans Dome	6,642	Mississippi River	182
Texas	1,700	Guadalupe Peak	8,751	Gulf of Mexico	Sea level
Utah	6,100	Kings Peak	13,498	Beaverdam Creek	2,000
Vermont	1,000	Mount Mansfield	4,393	Lake Champlain	95
Virginia	950	Mount Rogers	5,719	Atlantic Ocean	Sea level
Washington	1,700	Mount Rainier	14,408	Pacific Ocean	Sea level
West Virginia	1,500	Spruce Knob	4,860	Potomac River	240
Wisconsin	1,050	Rib Hill	1,940	Lake Michigan	581
Wyoming	6,700	Gannett Peak	13,785	Belle Fourche River	3,100

*Below sea level.

Forest Resources of the United States

The forests of the United States include over 800 different kinds of trees and still cover millions of acres. But since the days when half of the United States was forest the amount of forest land has decreased by about half and the condition of the remaining forests has deteriorated badly, necessitating a reforestation program.

United States Forest Land, 1940 (in acres)

Old growth	100,832,000
Second growth timber	112,030,000
Cordwood	100,791,000
Fair-satisfactory restock growth	71,306,000
Poor-nonrestocking growth	76,738,000
Total	461,697,000

Tidal Shore Lines of the U. S.

Source: U. S. Coast and Geodetic Survey.

State	Mainland	Islands	Total
Maine.....	558	761	1,319
New Hampshire.....	15	5	20
Massachusetts.....	421	250	671
Rhode Island.....	118	100	218
Connecticut.....	126	18	144
New York.....	31	798	829
New Jersey.....	392	368	760
Pennsylvania.....	13	.....	13
Delaware.....	140	14	154
Maryland.....	770	275	1,045
Virginia.....	780	500	1,280
North Carolina.....	1,040	831	1,871
South Carolina.....	281	960	1,241
Georgia.....	166	727	893
Florida.....	714	507	1,221
Atlantic Coast.....	5,565	6,114	11,679
Alabama.....	174	117	291
Florida.....	1,273	1,257	2,530
Mississippi.....	99	103	202
Louisiana.....	1,122	591	1,713
Texas.....	973	709	1,682
Gulf Coast.....	3,641	2,777	6,418
California.....	1,264	291	1,555
Oregon.....	429	60	489
Washington.....	1,037	684	1,721
Pacific Coast.....	2,730	1,035	3,765
Total.....	11,936	9,926	21,862

Arrival and Departure of Aliens

Source: Immig. & Naturalization Service.

Year	Aliens ad- mitted*	Aliens de- parted†	Excess of ad- missions	Aliens de- barred	Aliens de- ported
1920.....	621,576	428,062	193,514	11,795	2,762
1921.....	978,163	426,031	552,132	13,779	4,517
1922.....	432,505	345,384	87,121	13,731	4,345
1923.....	673,406	200,586	472,820	20,619	3,661
1924.....	879,302	216,745	662,557	30,284	6,409
1925.....	458,435	225,490	232,945	25,390	9,495
1926.....	496,106	227,755	268,351	20,550	10,904
1927.....	538,001	253,508	284,493	19,755	11,662
1928.....	500,631	274,356	226,275	18,839	11,625
1929.....	479,327	252,498	226,829	18,127	12,908
1930.....	446,214	272,425	173,789	8,233	16,631
1931.....	280,679	290,916	-10,237	9,744	18,142
1932.....	174,871	287,657	-112,786	7,064	19,426
1933.....	150,728	243,802	-93,074	5,527	19,865
1934.....	163,904	177,172	-13,268	5,384	8,879
1935.....	179,721	189,050	-9,329	5,558	8,319
1936.....	190,899	193,284	-2,385	7,000	9,155
1937.....	231,884	224,582	7,302	8,076	8,829
1938.....	252,697	222,614	30,083	8,066	9,275
1939.....	268,331	201,409	66,922	6,458	8,202
1940.....	203,788	166,164	42,524	5,300	6,954
1941.....	151,784	88,477	63,307	2,929	4,407
1942.....	111,238	74,552	36,686	1,833	3,709
1943.....	104,842	58,722	46,120	1,495	4,207
1944.....	142,192	84,409	57,783	1,642	7,179
1945.....	202,366	93,362	109,004	2,341	11,270
1946.....	312,190	204,353	107,837	2,942	14,375
1947.....	513,597	323,422	190,175	4,771	18,663

*Immigrants and nonimmigrants. †Emigrants and nonemigrants.

Estimated Population of the United States, 1940-48

Source: U. S. Bureau of the Census.

Date	Estimated population ¹	Increase since April 1, 1940		Change since preceding date				
		Number	%	Births ²	Deaths ³	Excess of births	Civilian arrivals ⁴	Net increase
April 1, 1940 (census)....	131,669,275	.....	.....	.....	.....	.....	.....	.....
July 1, 1940.....	131,970,000	301,000	0.23	623,000	353,000	270,000	31,000	301,000
January 1, 1941.....	132,638,000	969,000	0.74	1,311,000	693,000	618,000	49,000	668,000
July 1, 1941.....	133,203,000	1,534,000	1.16	1,317,000	761,000	556,000	9,000	565,000
January 1, 1942.....	133,953,000	2,284,000	1.73	1,401,000	682,000	719,000	32,000	750,000
July 1, 1942.....	134,665,000	2,996,000	2.28	1,407,000	733,000	674,000	37,000	712,000
January 1, 1943.....	135,646,000	3,977,000	3.02	1,631,000	701,000	930,000	51,000	981,000
July 1, 1943.....	136,497,000	4,828,000	3.67	1,578,000	786,000	792,000	59,000	851,000
January 1, 1944.....	137,368,000	5,699,000	4.33	1,580,000	762,000	818,000	53,000	871,000
July 1, 1944.....	138,083,000	6,414,000	4.87	1,436,000	794,000	642,000	73,000	715,000
January 1, 1945.....	138,923,000	7,253,000	5.51	1,533,000	786,000	747,000	92,000	839,000
July 1, 1945.....	139,586,000	7,916,000	6.01	1,422,000	866,000	556,000	107,000	663,000
January 1, 1946.....	140,394,000	8,724,000	6.63	1,472,000	710,000	762,000	46,000	808,000
July 1, 1946 ⁵	141,235,000	9,565,000	7.26	1,425,000	730,000	695,000	146,000	841,000
January 1, 1947 ⁵	142,696,000	11,026,000	8.37	2,033,000	676,000	1,356,000	105,000	1,461,000
July 1, 1947 ⁵	144,034,000	12,364,000	9.39	1,964,000	752,000	1,212,000	125,000	1,338,000
January 1, 1948 ⁶	145,434,000	13,765,000	10.45	1,931,000	705,000	1,227,000	174,000	1,401,000
July 1, 1948 ⁶	146,571,000	14,902,000	11.32	1,768,000	753,000	1,015,000	122,000	1,137,000

¹Including armed forces overseas. ²Estimated total, including adjustment for underregistration. ³Net gain through civilian movement to and from U. S., including both aliens and citizens. ⁴Revised estimate. ⁵Preliminary estimate. ⁶Based on incomplete and tentative data.

Population by Race, 1940

Source: U. S. Bureau of the Census.

State	Native white	Foreign-born white	Negro	Indian	Chinese	Japanese
Alabama	1,837,140	11,957	983,290	464	41	21
Arizona	389,955	36,837	14,993	55,076	1,449	632
Arkansas	1,458,392	7,692	482,578	278	432	3
California	5,725,870	870,893	124,306	18,675	39,556	93,717
Colorado	1,036,031	70,471	12,176	1,360	216	2,734
Connecticut	1,347,466	327,941	32,992	201	292	164
Delaware	215,695	14,833	35,876	14	39	22
D. C.	440,312	34,014	187,266	190	656	68
Florida	1,312,125	69,861	514,198	690	214	154
Georgia	2,026,362	11,916	1,084,927	106	326	31
Idaho	495,176	24,116	595	3,537	208	1,191
Illinois	6,534,829	969,373	387,446	624	2,456	462
Indiana	3,194,692	110,631	121,916	223	208	29
Iowa	2,403,446	117,245	16,694	733	81	29
Kansas	1,683,084	51,412	65,138	1,165	133	19
Kentucky	2,615,794	15,631	214,031	44	100	9
Louisiana	1,484,467	27,272	849,303	1,801	360	46
Maine	760,902	83,641	1,304	1,251	92	5
Maryland	1,436,766	81,715	301,931	73	437	36
Massachusetts	3,408,744	848,852	55,391	769	2,513	158
Michigan	4,356,613	683,030	208,345	6,282	924	139
Minnesota	2,474,078	294,904	9,928	12,528	551	51
Mississippi	1,100,339	5,988	1,074,578	2,134	743	1
Missouri	3,425,062	114,125	244,386	330	334	74
Montana	484,826	55,642	1,120	16,841	258	508
Nebraska	1,215,771	81,853	14,171	3,401	102	480
Nevada	93,431	10,599	664	4,747	286	470
New Hampshire	422,693	68,296	414	50	63	4
New Jersey	3,235,277	695,810	226,973	211	1,200	298
New Mexico	477,065	15,247	4,672	34,510	106	186
New York	10,026,016	2,853,530	571,221	8,651	13,731	2,538
North Carolina	2,553,589	9,046	981,298	22,546	83	21
North Dakota	557,192	74,272	201	10,114	56	83
Ohio	6,047,265	519,266	339,461	338	921	163
Oklahoma	2,083,869	20,359	168,849	63,125	112	57
Oregon	988,092	87,639	2,565	4,594	2,086	4,071
Pennsylvania	8,453,729	973,260	470,172	441	1,477	224
Rhode Island	564,021	137,784	11,024	196	257	6
South Carolina	1,079,393	4,915	814,164	1,234	27	33
South Dakota	575,023	44,052	474	23,347	36	19
Tennessee	2,395,586	11,320	508,736	114	60	12
Texas	5,253,157	234,388	924,391	1,103	1,031	458
Utah	510,622	32,298	1,235	3,611	228	2,210
Vermont	327,079	31,727	384	16	21	3
Virginia	1,992,596	22,987	661,449	198	208	74
Washington	1,494,984	203,163	7,424	11,394	2,345	14,565
West Virginia	1,742,320	41,782	117,754	25	57	3
Wisconsin	2,823,978	288,774	12,158	12,265	290	23
Wyoming	229,818	16,779	956	2,349	102	643
Totals	106,795,732	11,419,138	12,865,518	333,969	77,504	126,947

Cases of Single and Plural Births, U. S. 1946

Source: Federal Security Agency, Public Health Service.

Cases of births	Age of mother								50 & over	Not stated	Total cases
	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49			
Single births	3,437	318,317	1,032,504	914,686	572,600	286,958	73,186	5,323	195	8,794	3,216,000
Twins	13	2,082	9,501	11,002	8,354	4,795	935	48	...	52	36,782
Triplets	...	14	78	86	83	49	17	...	...	...	327
Quadruplets	...	...	...	2	2	1	...	...	...	...	5
Total cases	3,450	320,413	1,042,083	925,776	581,039	291,803	74,138	5,371	195	8,846	3,253,114

NOTE: "Cases" refer to confinements resulting in either a single or plural issue. Only those cases in which at least one child was born alive are included.

U. S. Population by States, 1900 to 1940

Source: U. S. Bureau of the Census.

State	1900 Population and rank		1910 Population and rank		1920 Population and rank		1930 Population and rank		1940 Population and rank	
Alabama	1,828,697	18	2,138,093	18	2,348,174	18	2,646,248	15	2,832,961	17
Arizona	122,931	46	204,354	45	334,162	45	435,573	43	499,261	43
Arkansas	1,311,564	25	1,574,449	25	1,752,204	25	1,854,482	25	1,949,387	24
California	1,485,053	21	2,377,549	12	3,426,861	8	5,677,251	6	6,907,387	5
Colorado	539,700	32	799,024	32	939,629	33	1,035,791	33	1,123,296	33
Connecticut	908,420	29	1,114,756	31	1,380,631	29	1,606,903	29	1,709,242	31
Delaware	184,735	44	202,322	46	223,003	46	238,380	46	266,505	46
D. C.	278,718	..	331,069	..	437,571	..	486,869	..	663,091	..
Florida	528,542	33	752,619	33	968,470	32	1,468,211	31	1,897,414	27
Georgia	2,216,331	11	2,609,121	10	2,895,832	12	2,908,506	14	3,123,723	14
Idaho	161,772	45	325,594	44	431,866	42	445,032	42	524,873	42
Illinois	4,821,550	3	5,638,591	3	6,485,280	3	7,630,654	3	7,897,241	3
Indiana	2,516,462	8	2,700,876	9	2,930,390	11	3,238,503	11	3,427,796	12
Iowa	2,231,853	10	2,224,771	15	2,404,021	16	2,470,939	19	2,538,268	20
Kansas	1,470,495	22	1,690,949	22	1,769,257	24	1,880,999	24	1,801,028	29
Kentucky	2,147,174	12	2,289,905	14	2,416,630	15	2,614,589	17	2,845,627	16
Louisiana	1,381,625	23	1,656,388	24	1,798,509	22	2,101,593	22	2,363,880	21
Maine	694,466	31	742,371	34	768,014	35	797,423	35	847,226	35
Maryland	1,188,044	26	1,295,346	27	1,449,661	28	1,631,526	28	1,821,244	28
Massachusetts	2,805,346	7	3,366,416	6	3,852,556	6	4,249,614	8	4,316,721	8
Michigan	2,420,982	9	2,810,173	8	3,668,412	7	4,842,325	7	5,256,106	7
Minnesota	1,751,394	19	2,075,708	19	2,387,125	17	2,563,953	18	2,792,300	18
Mississippi	1,551,270	20	1,797,114	21	1,790,618	23	2,009,821	23	2,183,796	23
Missouri	3,106,665	5	3,293,335	7	3,404,055	9	3,629,367	10	3,784,664	10
Montana	243,329	42	376,053	40	548,889	39	537,606	39	559,456	39
Nebraska	1,066,300	27	1,192,214	29	1,296,372	31	1,377,963	32	1,315,834	32
Nevada	42,335	48	81,875	48	77,407	48	91,058	48	110,247	48
New Hampshire	411,588	37	430,572	39	443,083	41	465,293	41	491,524	44
New Jersey	1,883,669	16	2,537,167	11	3,155,900	10	4,041,334	9	4,160,165	9
New Mexico	195,310	43	327,301	43	360,350	43	423,317	44	531,818	41
New York	7,268,894	1	9,113,614	1	10,385,227	1	12,588,066	1	13,479,142	1
North Carolina	1,893,810	15	2,206,287	16	2,559,123	14	3,170,276	12	3,571,623	11
North Dakota	319,146	40	577,056	37	646,872	36	680,845	38	641,935	38
Ohio	4,157,545	4	4,767,121	4	5,759,394	4	6,646,697	4	6,907,612	4
Oklahoma	790,391*	30	1,657,155	23	2,028,283	21	2,396,400	21	2,336,434	22
Oregon	413,536	36	672,765	35	783,389	34	953,786	34	1,089,684	34
Pennsylvania	6,302,115	2	7,665,111	2	8,720,017	2	9,631,350	2	9,900,180	2
Rhode Island	428,556	35	542,610	38	604,397	38	687,497	37	713,346	36
South Carolina	1,340,316	24	1,515,400	26	1,683,724	26	1,738,765	26	1,899,804	26
South Dakota	401,570	38	583,888	36	636,547	37	692,849	36	642,961	37
Tennessee	2,020,616	14	2,184,789	17	2,337,885	19	2,616,556	16	2,915,841	15
Texas	3,048,710	6	3,896,542	5	4,663,228	5	5,824,715	5	6,414,824	6
Utah	276,749	41	373,351	41	449,396	40	507,847	40	550,310	40
Vermont	343,641	39	355,956	42	352,428	44	359,611	45	359,231	45
Virginia	1,854,184	17	2,061,612	20	2,309,187	20	2,421,851	20	2,677,773	19
Washington	518,103	34	1,141,990	30	1,356,621	30	1,563,396	30	1,736,191	30
West Virginia	958,800	28	1,221,119	28	1,463,701	27	1,729,205	27	1,901,974	25
Wisconsin	2,069,042	13	2,333,860	13	2,632,067	13	2,939,006	13	3,137,587	13
Wyoming	92,531	47	145,965	47	194,402	47	225,565	47	250,742	47

*Includes population of Indian Territory: 392,060.

Population of the United States in 1790

Source: U. S. Bureau of the Census.

State	Population	State	Population	State	Population
Virginia	747,610	South Carolina	249,073	Georgia	82,548
Pennsylvania	434,373	Connecticut	237,946	Kentucky	73,677
North Carolina	393,751	New Jersey	184,139	Rhode Island	68,825
Massachusetts	378,787	New Hampshire	141,885	Delaware	59,096
New York	340,120	Maine	96,540	Tennessee	35,691
Maryland	319,728	Vermont	85,425	Total	3,929,214

Immigration to U. S., 1820 to 1947

Source: Immig. and Naturalization Service.

Year	No. of per- sons*	Year	No. of per- sons*	Year	No. of per- sons*	Year	No. of per- sons*
1820	8,385	1852	371,603	1884	518,592	1916	298,826
1821	9,127	1853	368,645	1885	395,346	1917	295,403
1822	6,911	1854	427,833	1886	334,203	1918	110,618
1823	6,354	1855	200,877	1887	490,109	1919	141,132
1824	7,912	1856	200,436	1888	546,839	1920	430,001
1825	10,199	1857	251,306	1889	444,427	1921	805,228
1826	10,837	1858	123,126	1890	455,302	1922	309,556
1827	18,875	1859	121,282	1891	560,319	1923	522,919
1828	27,382	1860	153,640	1892	579,663	1924	706,896
1829	22,520	1861	91,918	1893	439,730	1925	294,314
1830	23,322	1862	91,985	1894	285,631	1926	304,488
1831	22,633	1863	176,282	1895	258,536	1927	335,175
1832	60,482	1864	193,418	1896	343,267	1928	307,255
1833	58,640	1865	248,120	1897	230,832	1929	279,678
1834	65,365	1866	318,568	1898	229,299	1930	241,700
1835	45,374	1867	315,722	1899	311,715	1931	97,139
1836	76,242	1868	138,840	1900	448,572	1932	35,576
1837	79,340	1869	352,768	1901	487,918	1933	23,068
1838	38,914	1870	387,203	1902	648,743	1934	29,470
1839	68,069	1871	321,500	1903	857,046	1935	34,956
1840	84,066	1872	404,806	1904	812,870	1936	36,329
1841	80,289	1873	459,803	1905	1,026,499	1937	50,244
1842	104,565	1874	313,339	1906	1,100,735	1938	67,895
1843	52,496	1875	227,498	1907	1,285,349	1939	82,998
1844	78,615	1876	169,986	1908	782,870	1940	70,756
1845	114,371	1877	141,857	1909	751,786	1941	51,776
1846	154,416	1878	138,469	1910	1,041,570	1942	28,761
1847	234,968	1879	177,826	1911	878,587	1943	23,725
1848	226,527	1880	457,257	1912	838,172	1944	28,551
1849	297,024	1881	669,431	1913	1,197,892	1945	38,119
1850	369,980	1882	788,992	1914	1,218,480	1946	108,721
1851	379,466	1883	603,322	1915	326,700	1947	147,292

*From 1820-67, figures represent alien passengers arrived; 1868-91 and 1895-97, immigrant aliens arrived; 1892-94 and 1898 to present, immigrant aliens admitted.

Population of Territories

Source: U. S. Bureau of the Census.

Area	Population		Per- cent in- crease
	1930	1940	
Continental United States	122,775,046	131,669,275	7.2
Alaska	59,278	72,524	22.3
American Samoa	10,055	12,908	28.4
Guam	18,509	22,290	20.4
Hawaii	368,336	423,330	14.9
Panama Canal Zone	39,467	51,827	31.3
Philippine Islands*	13,513,000	16,356,000	21.0
Puerto Rico	1,543,913	1,869,255	21.1
Virgin Islands	22,012	24,889	13.1
Military and naval, etc., services abroad	89,453	118,933	33.0
United States, with ter- ritories and possessions	138,439,069	150,621,231	8.8

*The Philippine Islands became independent on July 4, 1946.

One Accidental Death Every 5 Minutes in 1947

Source: National Safety Council.

The nation's 1947 accident totals can be figured at the following approximate rates:

Class of accident	One every
All accidents	Deaths 5 minutes Injuries 3 seconds
Motor vehicle	Deaths 16 minutes Injuries 27 seconds
Occupational*	Deaths 31 minutes Injuries 15 seconds
Workers off-job*	Deaths 16½ minutes Injuries 12 seconds
Home*	Deaths 15 minutes Injuries 6 seconds
Public non-motor vehicle*	Deaths 29 minutes Injuries 14 seconds

*Civilians only.

Death Rates for Selected Causes, 1910-47

Source: Federal Security Agency, Public Health Service.

(Exclusive of stillbirths. Rates per 100,000 estimated population)

Cause	1910	1920	1930	1940 ¹	1947 ¹	Cause	1910	1920	1930	1940 ¹	1947 ¹
Accidents ²	82.7 ³	60.7 ³	53.8	47.3	47.7	Mot.-veh. accidents.	1.8 ⁴	10.3 ⁴	26.7	26.1	23.0
Appendicitis	10.8	13.2	15.2	9.9	3.6	Nephritis	94.8	88.8	91.0	81.4	55.3
Cancer ⁴	76.2	83.4	97.4	120.0	133.4	Pneumonia	141.7	136.8	83.1	54.8	38.0
Diabetes mellitus	15.3	16.1	19.1	26.5	26.1	Premature birth	37.7	43.6	31.5	24.5	28.3
Diphtheria	21.1	15.3	4.9	1.1	.5	Scarlet fever	11.4	4.6	1.9	.5	.1
Heart disease	158.9 ⁵	159.6 ⁵	214.2	291.9	318.4	Suicide	15.3	10.2	15.6	14.3	11.2
Homicide	4.6	6.8	8.8	6.2	6.1	Syphilis	13.5	16.5	15.7	14.4	8.9
Influenza	14.2	70.5	19.4	15.3	5.2	Tuberculosis	153.8	113.1	71.1	45.8	33.4
Malaria	1.1	3.4	2.9	1.1	.2	Typhoid ⁷	22.5	7.6	4.8	1.1	.3
Meningitis	.3	1.6	3.6	.5	.7	Whooping cough	11.6	12.5	4.8	2.2	1.2

¹Excludes armed forces overseas. Rates for 1947 estimated from 10-percent sample of death certificates.
²Other than motor-vehicle accidents. ³Excludes legal executions. ⁴Includes other malignant tumors. ⁵Excludes diseases of coronary arteries. ⁶Excludes automobile collisions with trains and street cars, and motorcycle accidents. ⁷Includes paratyphoid fever.

NOTE: Rates are for population in death-registration states: 1910—51.4% of U. S. population; 1920—80.9%; 1930—95.3%; 1940-47—100%.

Immigration by Country of Origin, 1820 to 1947

Source: Immigration and Naturalization Service.

(Figures are totals, not annual averages, and were tabulated as follows: 1820-67, alien passengers arrived; 1868-91 and 1895-97, immigrant aliens arrived; 1892-94 and 1898 to present, immigrant aliens admitted. Data before 1906 relate to country whence alien came; since 1906, to country of last permanent address.)

Countries	1820-1900	1901-1910	1911-1920	1921-1930	1931-1940	1941-1947	1820-1947
Europe:							
Albania ¹	.....	.....	.....	1,663	2,040	57	3,760
Austria ²	1,027,195	2,145,266	453,649	32,868	3,563	1,675	3,664,216
Belgium	62,161	41,635	33,746	15,846	4,817	6,662	164,867
Bulgaria ³	160	39,280	22,533	2,945	938	221	66,077
Czechoslovakia ¹	.....	.....	3,426	102,194	14,393	3,073	123,086
Denmark	192,768	65,285	41,983	32,430	2,559	1,725	336,750
Estonia ¹	.....	.....	.....	1,576	506	145	2,227
Finland ¹	.....	.....	756	16,691	2,146	938	20,531
France	397,489	73,379	61,897	49,610	12,623	24,013	619,011
Germany ²	5,010,248	341,498	143,945	412,202	114,058	23,334	6,045,285
Great Britain: England	1,824,054	388,017	249,944	157,420	21,756	64,170	2,705,361
Scotland	368,280	120,469	78,357	159,781	6,887	5,253	739,027
Wales	42,076	17,464	13,107	13,012	735	1,862	88,256
Not specified ⁴	793,741	.....	.....	.....	.....	.....	793,741
Greece	18,685	167,519	184,201	51,084	9,119	3,810	434,418
Hungary ²	.....	.....	442,693	30,680	7,861	1,584	482,818
Ireland	3,873,104	339,065	146,181	220,591	13,167	5,449	4,597,557
Italy	1,040,479	2,045,877	1,109,524	455,315	68,028	17,437	4,736,660
Latvia ¹	.....	.....	.....	3,399	1,192	242	4,833
Lithuania ¹	.....	.....	.....	6,015	2,201	431	8,647
Luxemburg ¹	.....	.....	.....	727	565	533	1,825
Netherlands	127,681	48,262	43,718	26,943	7,150	4,451	258,210
Norway ⁵	474,684	190,505	66,395	68,531	4,740	2,915	807,770
Poland ⁶	165,182	.....	4,813	227,734	17,026	2,755	417,510
Portugal	63,840	69,149	89,732	29,994	3,329	4,145	260,189
Rumania ⁷	19,109	53,008	13,311	67,646	3,871	493	157,438
Spain	41,361	27,935	68,611	28,958	3,258	1,702	171,825
Sweden ⁸	771,631	249,534	95,074	97,249	3,960	3,375	1,220,823
Switzerland	202,479	34,922	23,091	29,676	5,512	4,700	300,380
Turkey in Europe	5,824	79,976	54,677	14,659	737	309	156,182
U.S.S.R. ⁹	761,742	1,597,306	921,201	61,742	1,356	434	3,343,781
Yugoslavia ³	.....	.....	1,888	49,064	5,835	711	57,498
Other Europe	1,940	665	8,111	9,603	2,361	849	23,529
Total Europe	17,285,913	8,136,016	4,376,564	2,477,853	348,289	189,453	32,814,088
Asia:							
China	305,455	20,605	21,278	29,907	4,928	4,811	386,984
India	696	4,713	2,082	1,886	496	1,202	11,075
Japan ⁹	28,547	129,797	83,837	33,462	1,948	503	278,094
Turkey in Asia ¹⁰	29,088	77,393	79,389	19,165	328	149	205,512
Other Asia	5,883	11,059	5,973	12,980	7,644	4,159	47,698
Total Asia	369,669	243,567	192,559	97,400	15,344	10,824	929,363
America:							
Canada & Newfoundland ¹¹	1,051,275	179,226	742,185	924,515	108,527	99,192	3,104,920
Central America	2,173	8,192	17,159	15,769	5,861	14,394	63,548
Mexico ¹²	28,003	49,642	219,004	459,287	22,319	37,378	815,633
South America	12,105	17,280	41,899	42,215	7,803	12,394	133,696
West Indies	125,598	107,548	123,424	74,899	15,502	29,854	476,825
Other America ¹³	.....	.....	.....	31	25	15,321	15,377
Total America	1,219,154	361,888	1,143,671	1,516,716	160,037	208,533	4,609,999
Africa	2,213	7,368	8,443	6,286	1,750	4,496	30,556
Australia & New Zealand	19,679	11,975	12,348	8,299	2,231	11,466	65,998
Pacific Islands	7,810	1,049	1,079	427	780	2,093	13,238
Countries not specified	219,168	33,523 ¹⁴	1,147	228	.....	100	254,166
Total all countries	19,123,606	8,795,386	5,735,811	4,107,209	528,431	426,965	38,717,408

¹Countries established since beginning of World War I are theretofore included with countries to which they belonged. ²Data for Austria-Hungary not reported until 1861. Austria and Hungary recorded separately after 1905. Austria included with Germany 1938-45. ³Bulgaria, Serbia, Montenegro first reported in 1899. Bulgaria reported separately since 1920. Since 1922, Serb, Croat and Slovene Kingdom recorded as Yugoslavia. ⁴For United Kingdom. ⁵Norway included with Sweden 1820-68. ⁶Included with Austria-Hungary, Germany and Russia 1899-1919. ⁷No record of immigration until 1880. ⁸Since 1931, U.S.S.R. has been broken down into European Russia and Siberia or Asiatic Russia. ⁹No record of immigration until 1861. ¹⁰No record of immigration until 1869. ¹¹Includes all British North American possession 1820-98. ¹²No record of immigration 1868-93. ¹³Included with "Countries not specified" prior to 1925. ¹⁴Includes 32,897 persons returning in 1906 to their homes in U. S.

U. S. Foreign-born Population by Country of Birth

Source: U. S. Bureau of the Census.

Country of birth	Total foreign-born 1900	Foreign-born white				Percent ¹	
		1910	1920	1930	1940	1930	1940
Northwestern Europe							
England.....	840,513	876,455	812,828	808,684	621,975	5.8	5.4
Scotland.....	233,524	261,034	254,567	354,323	279,321	2.5	2.4
Wales.....	93,586	82,479	67,066	60,205	35,360	.4	.3
Northern Ireland.....	1,615,459	1,352,155	1,037,233	178,832	106,416	1.3	.9
Eire.....				744,810	572,031	5.3	5.0
Norway.....	336,388	403,858	363,862	347,852	262,088	2.5	2.3
Sweden.....	582,014	665,183	625,580	595,250	445,070	4.3	3.9
Denmark.....	153,690	181,621	189,154	179,474	138,175	1.3	1.2
Iceland.....				2,764	2,104	...	...
Netherlands.....	94,931	120,053	131,766	133,133	111,064	1.0	1.0
Belgium.....	29,757	49,397	62,686	64,194	53,958	.5	.5
Luxemburg.....	3,031	3,068	12,585	9,048	6,886	.1	.1
Switzerland.....	115,593	124,834	118,659	113,010	88,293	.8	.8
France.....	104,197	117,236	152,890	135,265	102,930	1.0	.9
Central Europe							
Germany.....	2,663,418	2,311,085	1,686,102	1,608,814	1,237,772	11.5	10.8
Poland.....	383,407	293,784	1,139,978	1,268,583	993,479	9.1	8.7
Czechoslovakia.....	432,798	285,506	362,436	491,638	319,971	3.5	2.8
Austria.....			575,625	370,914	479,906	2.7	4.2
Hungary.....	145,714	495,600	397,282	274,450	290,228	2.0	2.5
Yugoslavia.....	...	...	169,437	211,416	161,093	1.5	1.4
Eastern Europe							
U.S.S.R.....	423,726	2,184,382	1,400,489	1,153,624	1,040,884	8.2	9.1
Latvia.....				20,673	18,636	.1	.2
Estonia.....	62,641	129,669	149,824	3,550	4,178	...	...
Lithuania.....				135,068	193,606	165,771	1.4	1.5
Finland.....	15,032	65,920	102,823	142,478	117,210	1.0	1.0
Rumania.....	...	11,453	10,477	146,393	115,940	1.0	1.0
Bulgaria.....	...	...	...	9,399	8,888	.1	.1
Turkey in Europe.....	9,910	32,221	5,284	2,257	4,412	...	...
Southern Europe							
Greece.....	8,515	101,264	175,972	174,526	163,252	1.2	1.4
Italy.....	484,027	1,343,070	1,610,109	1,790,424	1,623,580	12.8	14.2
Spain.....	7,050	21,977	49,247	59,033	47,707	.4	.4
Portugal.....	30,608	57,623	67,453	69,993	62,347	.5	.5
Other Europe.....	2,251	12,851	11,509	25,065	19,819	.2	.2
Asia							
Palestine.....	(3)	59,702	3,202	6,135	7,047	...	.1
Syria.....			51,900	57,227	50,859	.4	.4
Turkey in Asia.....	120,248	4,612	11,014	46,651	52,479	.3	.5
Other Asia.....			44,334	47,567	39,524	.3	.3
America							
Canada-French.....	395,126	385,083	307,786	370,852	273,366	2.7	2.4
Canada-other.....	784,796	810,987	810,092	907,660	770,753	6.5	6.7
Newfoundland.....	(6)	5,076	13,242	23,971	21,361	.2	.2
Mexico.....	103,393	219,802	478,383	639,017	377,433	4.6	3.3
Cuba.....	11,081	12,869	12,843	16,089	15,277	.1	.1
Other West Indies.....	14,354	10,300	13,526	15,511	15,257	.1	.1
Central America.....	3,897	1,507	4,074	7,791	7,638	.1	.1
South America.....	4,733	7,562	16,855	30,333	28,770	.2	.3
All other							
Australia.....	6,807	8,938	10,801	12,720	10,998	.1	.1
Azores.....	9,768	15,795	33,788	35,432	25,751	.3	.2
Other Atlantic Islands.....			5,196	4,053	3,232	...	...
Other and not reported.....	15,293	15,434	17,727	18,716	18,649	.1	.2
Total.....	10,341,276	13,345,545	13,712,754	13,983,405	11,419,138	100.0	100.0

¹Percentages not shown are less than one-tenth of one percent.²Persons reported in 1910 as of Polish mother tongue born in Austria, Germany, and Russia have been deducted from their respective countries and combined as Poland.³Turkey in Asia included with Turkey in Europe prior to 1910.⁴Includes 4,635 persons born in Serbia and 5,363 persons born in Montenegro, which became part of Yugoslavia in 1918.⁵Turkey in Asia included Armenia, Palestine, and Syria in 1910. Subsequent to 1910 Armenia included with "Other Asia." ⁶Newfoundland included with Canada in 1900.

A Brief Summary of Naturalization Requirements and Procedure

Sources: Immigration and Naturalization Service.

An applicant for naturalization must have been lawfully admitted to the United States for permanent residence.

The first step toward becoming a citizen is to make a declaration of intention, commonly called taking out the first paper. An applicant for the first paper must be at least 18 years old and may take out the first paper at any time after arrival as a permanent resident and at any place where a naturalization court is located.

When applying for the first paper, an applicant must fill out Form N-300. After the Government receives and checks the Form N-300, the applicant is notified as to when and where to get the first paper. The clerk of the court fills out the first paper, using the information the applicant gave in Form N-300. The applicant must sign the first paper before the clerk of the court and swear that the statements in it are true. The fee for this is \$3.

In taking the second step toward getting a certificate of naturalization (second paper), a preliminary application must be made on Form N-400. The petition for naturalization is filed with the clerk of the court. An applicant who is required by law to attach a declaration of intention to his petition must be at least 20 years old on the day he files the petition. This age limitation does not affect a person applying under a section of the law that does not require the applicant to have a declaration of intention.

An applicant must be able to carry on an ordinary conversation in English and to sign his name (unless physically unable to talk or to write). Some courts require that an applicant for a second paper must be able to read English; the applicant should find out whether the court in his district has such a requirement.

An applicant must have lived continuously in the United States for the number of years required by law; for aliens who are required to have a first paper, that is five years; they must have lived at least the last six months of that five-year period in the state where they apply for the second paper. For wives and husbands of citizens of the United States and some of the other aliens who do not need a first paper it means one, two, or three years, depending on the date of marriage or other facts of the case.

The applicant will be notified by the Immigration and Naturalization office when and where to come for his first hearing. He must take with him two citizen witnesses. An examiner questions them separately to make sure the applicant meets the requirements. If the examiner is satisfied that the applicant does, he helps him file a petition for naturalization. The fee for this is \$8.

Not less than thirty days after the petition was filed, the applicant is notified to appear in the naturalization court for a final hearing. If his petition is granted, the applicant must under oath renounce allegiance to any foreign state of which he is a citizen or subject, and swear allegiance to the United States.

The examiner may recommend that an application for citizenship be granted, denied, or put off until the applicant is better prepared. If the examiner recommends that the petition be denied, notice of this recommendation is sent to the applicant before the case is put on the court calendar for final hearing. The applicant may ask to be examined by the judge in court if he feels that the examiner's recommendation is not just.

Naturalization Statistics, 1907 to 1947

Period	Declarations filed	Petitions filed			Aliens naturalized		
		Civilian	Military	Total	Civilian	Military	Total
1907 to 1910.....	526,322	164,036	.....	164,036	111,738	.....	111,738
1911 to 1920.....	2,686,909	1,137,084	244,300	1,381,384	884,672	244,300	1,128,972
1921 to 1930.....	2,709,014	1,827,073	57,204	1,884,277	1,716,979	56,206	1,773,185
1931 to 1940.....	1,369,479	1,612,411	24,702	1,637,113	1,498,573	19,891	1,518,464
1941.....	224,123	277,807	.....	277,807	275,747	1,547	277,294
1942.....	221,796	341,979	1,508	343,487	268,762	1,602	270,364
1943.....	115,664	338,885	38,240	377,125	281,459	37,474*	318,933
1944.....	42,368	275,486	50,231	325,717	392,766	49,213*	441,979
1945.....	31,195	172,905	23,012	195,917	208,707	22,695*	231,402
1946.....	28,787	110,071	13,793	123,864	134,849	15,213*	150,062
1947.....	37,771	70,767	18,035	88,802	77,442	16,462*	93,904
1941 to 1947.....	701,704	1,587,900	144,819	1,732,719	1,639,732	144,206	1,783,938
1907 to 1947.....	7,993,428	6,328,504	471,025	6,799,529	5,851,694	464,603	6,316,297

*Members of the armed forces including 1,425 naturalized overseas in 1943; 6,496 in 1944; 5,666 in 1945; 2,054 in 1946; and 5,370 in 1947.

Population for Urban and Rural Groups, 1930 and 1940

The urban area is made up for the most part of cities and other incorporated places having 2,500 inhabitants or more. In addition, it includes unincorporated political subdivisions with a population of 10,000 or more and a population density of 1,000 or more per square mile, and in the states of Massachusetts, Rhode Island, and New Hampshire those towns (townships) which contain a village of 2,500 or more, comprising either by itself or when combined with other villages within the same town, more than fifty percent of the total population of the town.

The remainder of the population is classified as rural and is subdivided into the rural-farm population, which comprises all rural residents living on farms, without regard to occupation, and the rural-nonfarm population, which comprises the remaining rural population.

Type of place by population	1930			1940		
	Number of places	Population	Percent	Number of places	Population	Percent
Urban territory.....	3,165	68,954,823	56.2	3,464	74,423,702	56.5
1,000,000 or more.....	5	15,064,555	12.3	5	15,910,866	12.1
500,000—1,000,000.....	8	5,763,987	4.7	9	6,456,959	4.9
250,000—500,000.....	24	7,956,228	6.5	23	7,827,514	5.9
100,000—250,000.....	56	7,540,966	6.1	55	7,792,650	5.9
50,000—100,000.....	98	6,491,448	5.3	107	7,343,917	5.6
25,000—50,000.....	185	6,425,693	5.2	213	7,417,093	5.6
10,000—25,000.....	606	9,097,200	7.4	665	9,966,898	7.6
5,000—10,000.....	851	5,897,156	4.8	965	6,681,894	5.1
2,500—5,000.....	1,332	4,717,590	3.8	1,422	5,025,911	3.8
Rural territory.....	.....	53,820,223	43.8	.....	57,245,573	43.5
1,000—2,500 (Incorporated).....	3,087	4,820,707	3.9	3,205	5,026,834	3.8
Under 1,000 (Incorporated).....	10,346	4,362,746	3.6	10,083	4,315,843	3.3
Unincorporated territory.....	.....	44,636,770	36.4	.....	47,902,896	36.4
Total United States.....	.....	122,775,046	100.0	.....	131,669,275	100.0

U. S. Population by Sex, 1940

State	Males	Females	Comparison*	State	Males	Females	Comparison*
Alabama.....	1,399,901	1,433,060	97.7	New Hampshire.....	244,909	246,615	99.3
Arizona.....	258,170	241,091	107.1	New Jersey.....	2,069,159	2,091,006	99.0
Arkansas.....	982,916	966,471	101.7	New Mexico.....	271,846	259,972	104.6
California.....	3,515,730	3,391,657	103.7	New York.....	6,690,326	6,788,816	98.5
Colorado.....	568,778	554,518	102.6	North Carolina.....	1,772,990	1,798,633	98.6
Connecticut.....	849,923	859,319	98.9	North Dakota.....	335,402	306,533	109.4
Delaware.....	134,333	132,172	101.6	Ohio.....	3,461,072	3,446,540	100.4
D. C.....	317,522	345,569	91.9	Oklahoma.....	1,181,892	1,154,542	102.4
Florida.....	943,123	954,291	98.8	Oregon.....	562,689	526,995	106.8
Georgia.....	1,534,758	1,588,965	96.6	Pennsylvania.....	4,951,207	4,948,973	100.0
Idaho.....	276,579	248,294	111.4	Rhode Island.....	349,404	363,942	96.0
Illinois.....	3,957,149	3,940,092	100.4	South Carolina.....	935,239	964,565	97.0
Indiana.....	1,725,201	1,702,595	101.3	South Dakota.....	332,514	310,447	107.1
Iowa.....	1,280,494	1,257,774	101.8	Tennessee.....	1,445,829	1,470,012	98.4
Kansas.....	906,340	894,688	101.3	Texas.....	3,221,103	3,193,721	100.9
Kentucky.....	1,435,812	1,409,815	101.8	Utah.....	278,620	271,690	102.6
Louisiana.....	1,172,382	1,191,498	98.4	Vermont.....	182,224	177,007	102.9
Maine.....	425,821	421,405	101.0	Virginia.....	1,349,004	1,328,769	101.5
Maryland.....	915,038	906,206	101.0	Washington.....	905,757	830,434	109.1
Massachusetts.....	2,102,479	2,214,242	95.0	West Virginia.....	968,582	933,392	103.8
Michigan.....	2,694,727	2,561,379	105.2	Wisconsin.....	1,600,176	1,537,411	104.1
Minnesota.....	1,427,545	1,364,755	104.6	Wyoming.....	135,055	115,687	116.7
Mississippi.....	1,084,482	1,099,314	98.7	Total U. S., 1940.....	66,061,592	65,607,683	100.7
Missouri.....	1,881,252	1,903,412	98.8	Total U. S., 1930.....	62,137,080	60,637,966	102.5
Montana.....	299,009	260,447	114.8	Total U. S., 1920.....	53,900,431	51,810,189	104.0
Nebraska.....	665,788	650,046	102.4	Total U. S., 1910.....	47,332,277	44,639,989	106.0
Nevada.....	61,341	48,906	125.4	Total U. S., 1900.....	38,816,448	37,178,127	104.4

*Males per 100 females.

Source: U. S. Bureau of the Census.

100 Centenarians Die Monthly

An average of 100 persons who claimed to have passed their hundredth birthday die each month in the United States.

Of 1,411,338 deaths in 1944 in the U. S., 1,225 were of persons reported to be 100 years old or over. Most were women; 394

white, 366 Negro and thirteen of other races, as compared with 244 white men, 197 Negro men and eleven of other races.

One out of every 293 Negroes dying in 1944 was 100 or older; the corresponding ratio for whites was one out of 1,842.

Population and Area of Major U. S. Cities, 1940

(over 50,000 population)

Source: U. S. Bureau of the Census.

Rank	City	Population	Area, sq. mi.*	Rank	City	Population	Area, sq. mi.*
1	New York, N. Y.	7,454,995	365.4	61	Yonkers, N. Y.	142,598	20.3
	Bronx	1,394,711	54.4	62	Tulsa, Okla.	142,157	22.0
	Brooklyn	2,698,285	88.8	63	Scranton, Pa.	140,404	19.5
	Manhattan	1,889,924	31.2	64	Paterson, N. J.	139,656	8.4
	Queens	1,297,634	126.6	65	Albany, N. Y.	130,577	19.6
	Richmond	174,441	64.4	66	Chattanooga, Tenn.	128,163	27.9
2	Chicago, Ill.	3,396,808	211.3	67	Trenton, N. J.	124,697	7.7
3	Philadelphia, Pa.	1,931,334	135.0	68	Spokane, Wash.	122,001	41.5
4	Detroit, Mich.	1,623,452	142.0	69	Kansas City, Kans.	121,458	20.4
5	Los Angeles, Calif.	1,504,277	452.2	70	Fort Wayne, Ind.	118,410	17.1
6	Cleveland, Ohio	878,336	73.1	71	Camden, N. J.	117,536	9.8
7	Baltimore, Md.	859,100	85.6	72	Erie, Pa.	116,955	18.0
8	St. Louis, Mo.	816,048	65.0	73	Fall River, Mass.	115,428	40.8
9	Boston, Mass.	770,816	65.9	74	Wichita, Kans.	114,966	21.6
10	Pittsburgh, Pa.	671,659	55.1	75	Wilmington, Del.	112,504	17.3
11	Washington, D. C.	663,091	69.2	76	Gary, Ind.	111,719	40.6
12	San Francisco, Calif.	634,536	93.1	77	Knoxville, Tenn.	111,580	25.4
13	Milwaukee, Wis.	587,472	43.4	78	Cambridge, Mass.	110,879	7.0
14	Buffalo, N. Y.	575,901	50.2	79	Reading, Pa.	110,568	8.8
15	New Orleans, La.	494,537	363.5	80	New Bedford, Mass.	110,341	19.4
16	Minneapolis, Minn.	492,370	58.8	81	Elizabeth, N. J.	109,912	13.3
17	Cincinnati, Ohio	455,610	72.4	82	Tacoma, Wash.	109,408	49.1
18	Newark, N. J.	429,760	26.8	83	Canton, Ohio	108,401	14.0
19	Kansas City, Mo.	399,178	59.4	84	Tampa, Fla.	108,391	22.7
20	Indianapolis, Ind.	386,972	53.7	85	Sacramento, Calif.	105,958	13.7
21	Houston, Tex.	384,514	72.8	86	Peoria, Ill.	105,087	13.7
22	Seattle, Wash.	368,302	80.7	87	Somerville, Mass.	102,177	4.2
23	Rochester, N. Y.	324,975	35.3	88	Lowell, Mass.	101,389	14.1
24	Denver, Colo.	322,412	58.7	89	South Bend, Ind.	101,268	19.7
25	Louisville, Ky.	319,077	40.8	90	Duluth, Minn.	101,065	70.9
26	Columbus, Ohio	306,087	39.5	91	Charlotte, N. C.	100,899	19.3
27	Portland, Oreg.	305,394	66.9	92	Utica, N. Y.	100,518	15.8
28	Atlanta, Ga.	302,288	34.7	93	Waterbury, Conn.	99,314	28.2
29	Oakland, Calif.	302,163	60.3	94	Shreveport, La.	98,167	19.2
30	Jersey City, N. J.	301,173	21.5	95	Lynn, Mass.	98,123	10.9
31	Dallas, Tex.	294,734	41.8	96	Evansville, Ind.	97,062	9.7
32	Memphis, Tenn.	292,942	48.5	97	Allentown, Pa.	96,904	16.1
33	St. Paul, Minn.	287,736	54.9	98	El Paso, Tex.	96,810	13.7
34	Toledo, Ohio	282,349	41.3	99	Savannah, Ga.	95,996	11.5
35	Birmingham, Ala.	267,583	50.3	100	Little Rock, Ark.	88,039	17.9
36	San Antonio, Tex.	253,854	35.8	101	Austin, Tex.	87,930	26.3
37	Providence, R. I.	253,504	19.9	102	Schenectady, N. Y.	87,549	10.4
38	Akron, Ohio	244,791	54.1	103	Wilkes-Barre, Pa.	86,236	7.2
39	Omaha, Nebr.	223,844	39.3	104	Berkeley, Calif.	85,547	17.2
40	Dayton, Ohio	210,718	23.7	105	Rockford, Ill.	84,637	12.4
41	Syracuse, N. Y.	205,967	25.7	106	Lawrence, Mass.	84,323	7.2
42	Oklahoma City, Okla.	204,424	49.8	107	Harrisburg, Pa.	83,893	9.8
43	San Diego, Calif.	203,341	105.8	108	Saginaw, Mich.	82,794	17.0
44	Worcester, Mass.	193,694	38.3	109	Glendale, Calif.	82,582	20.0
45	Richmond, Va.	193,042	23.0	110	Sioux City, Iowa	82,364	46.2
46	Fort Worth, Tex.	177,662	58.1	111	Lincoln, Nebr.	81,984	24.3
47	Jacksonville, Fla.	173,065	39.4	112	Pasadena, Calif.	81,864	19.4
48	Miami, Fla.	172,172	38.1	113	Altoona, Pa.	80,214	9.0
49	Youngstown, Ohio	167,720	33.1	114	Winston-Salem, N. C.	79,815	15.1
50	Nashville, Tenn.	167,402	22.0	115	Bayonne, N. J.	79,198	11.4
51	Hartford, Conn.	166,267	18.6	116	Huntington, W. Va.	78,836	14.8
52	Grand Rapids, Mich.	164,292	23.0	117	Lansing, Mich.	78,753	11.6
53	Long Beach, Calif.	164,271	32.6	118	Mobile, Ala.	78,720	13.5
54	New Haven, Conn.	160,605	22.5	119	Binghamton, N. Y.	78,309	10.6
55	Des Moines, Iowa	159,819	53.8	120	Montgomery, Ala.	78,084	20.3
56	Flint, Mich.	151,543	29.4	121	Niagara Falls, N. Y.	78,029	15.9
57	Salt Lake City, Utah	149,934	52.5	122	Manchester, N. H.	77,685	33.9
58	Springfield, Mass.	149,554	33.1	123	Quincy, Mass.	75,810	26.4
59	Bridgeport, Conn.	147,121	17.9	124	Pawtucket, R. I.	75,797	9.0
60	Norfolk, Va.	144,332	35.9	125	St. Joseph, Mo.	75,711	14.1

Rank	City	Population	Area, sq. mi.*	Rank	City	Population	Area, sq. mi.*
126	East St. Louis, Ill.	75,609	13.9	162	Lancaster, Pa.	61,345	3.9
127	Springfield, Ill.	75,503	9.5	163	Springfield, Mo.	61,238	13.6
128	Portland, Maine	73,643	37.8	164	Wheeling, W. Va.	61,099	11.1
129	Charleston, S. C.	71,275	5.9	165	Galveston, Tex.	60,862	34.8
130	Springfield, Ohio	70,662	11.8	166	St. Petersburg, Fla.	60,812	58.1
131	Troy, N. Y.	70,304	10.0	167	Fresno, Calif.	60,685	9.9
132	Hammond, Ind.	70,184	24.4	168	Durham, N. C.	60,195	13.3
133	Newton, Mass.	69,873	17.5	169	Greensboro, N. C.	59,319	18.0
134	Roanoke, Va.	69,287	10.8	170	Decatur, Ill.	59,305	9.5
135	Lakewood, Ohio	69,160	5.6	171	Chester, Pa.	59,285	6.1
136	East Orange, N. J.	68,945	3.9	172	Beaumont, Tex.	59,061	10.5
137	New Britain, Conn.	68,685	13.8	173	Bethlehem, Pa.	58,490	17.8
138	San Jose, Calif.	68,457	14.8	174	New Rochelle, N. Y.	58,408	10.0
139	Charleston, W. Va.	67,914	8.5	175	Malden, Mass.	58,010	4.8
140	Topeka, Kans.	67,833	11.7	176	Macon, Ga.	57,865	8.1
141	Madison, Wis.	67,447	8.1	177	Corpus Christi, Tex.	57,301	13.9
142	Mount Vernon, N. Y.	67,362	4.2	178	York, Pa.	56,712	4.1
143	Racine, Wis.	67,195	8.7	179	Union City, N. J.	56,173	1.3
144	Johnstown, Pa.	66,668	5.6	180	Waco, Tex.	55,982	15.5
145	Pontiac, Mich.	66,626	20.0	181	McKeesport, Pa.	55,355	5.2
146	Davenport, Iowa	66,039	19.8	182	Irvington, N. J.	55,328	3.1
147	Oak Park, Ill.	66,015	4.7	183	Cleveland Heights, Ohio	54,992	8.2
148	Augusta, Ga.	65,919	9.8	184	Stockton, Calif.	54,714	9.9
149	Phoenix, Ariz.	65,414	9.7	185	East Chicago, Ind.	54,637	10.7
150	Evanston, Ill.	65,389	8.2	186	Kalamazoo, Mich.	54,097	8.5
151	Cicero, Ill.	64,712	5.8	187	Holyoke, Mass.	53,750	22.8
152	Atlantic City, N. J.	64,094	16.4	188	Santa Monica, Calif.	53,500	8.0
153	Dearborn, Mich.	63,584	25.1	189	Columbus, Ga.	53,280	6.8
154	Medford, Mass.	63,083	8.6	190	Pueblo, Colo.	52,162	10.2
155	Terre Haute, Ind.	62,693	9.8	191	Waterloo, Iowa	51,743	13.6
156	Columbia, S. C.	62,396	9.0	192	Amarillo, Tex.	51,686	16.4
157	Brockton, Mass.	62,343	21.5	193	Asheville, N. C.	51,310	14.7
158	Cedar Rapids, Iowa	62,120	28.4	194	Highland Park, Mich.	50,810	3.0
159	Jackson, Miss.	62,107	16.1	195	Portsmouth, Va.	50,745	6.9
160	Covington, Ky.	62,018	6.5	196	Hamilton, Ohio	50,592	6.6
161	Passaic, N. J.	61,394	3.2	197	Hoboken, N.J.	50,115	1.6

*Total land and water area.

Density of U. S. Population by State

Source: U. S. Bureau of the Census.

State	Land area, sq. mi.	Population per sq. mi.			State	Land area, sq. mi.	Population per sq. mi.		
		1900	1920	1940			1900	1920	1940
District of Columbia	61	4,645.3	7,292.9	10,870.3	Mississippi	47,420	33.5	38.6	46.1
Rhode Island	1,058	401.6	566.4	674.2	Iowa	55,986	40.2	43.2	45.3
New Jersey	7,522	250.7	420.0	553.1	California	156,803	9.5	22.0	44.1
Massachusetts	7,907	349.0	479.2	545.9	Vermont	9,278	37.7	38.6	38.7
Connecticut	4,899	188.5	286.4	348.9	Arkansas	52,725	25.0	33.4	37.0
New York	47,929	152.5	217.9	281.2	Florida	54,262	9.6	17.7	35.0
Pennsylvania	45,045	140.6	194.5	219.8	Minnesota	80,009	21.7	29.5	34.9
Maryland	9,887	119.5	145.8	184.2	Oklahoma	69,283	11.4*	29.2	33.7
Ohio	41,122	102.1	141.4	168.0	Maine	31,040	23.2	25.7	27.3
Illinois	55,947	86.1	115.7	141.2	Washington	66,977	7.8	20.3	25.9
Delaware	1,978	94.0	113.5	134.7	Texas	263,644	11.6	17.8	24.3
Indiana	36,205	70.1	81.3	94.7	Kansas	82,113	18.0	21.6	21.9
Michigan	57,022	42.1	63.8	92.2	Nebraska	76,653	13.9	16.9	17.2
West Virginia	24,090	39.9	60.9	79.0	Oregon	96,350	4.3	8.2	11.3
North Carolina	49,142	38.9	52.5	72.7	Colorado	103,967	5.2	9.1	10.8
Kentucky	40,109	53.4	60.1	70.9	North Dakota	70,054	4.5	9.2	9.2
Minnesota	41,961	48.5	56.1	69.5	South Dakota	76,536	5.2	8.3	8.4
Virginia	39,899	46.1	57.4	67.1	Utah	82,346	3.4	5.5	6.7
South Carolina	30,594	44.0	55.2	62.1	Idaho	82,808	1.9	5.2	6.3
Wisconsin	54,715	37.4	47.6	57.3	New Mexico	121,511	1.6	2.9	4.4
Alabama	51,078	35.7	45.8	55.5	Arizona	113,580	1.1	2.9	4.4
Missouri	69,270	45.2	49.5	54.6	Montana	146,316	1.7	3.8	3.8
New Hampshire	9,024	45.6	49.1	54.5	Wyoming	97,506	.9	2.0	2.6
Georgia	58,518	37.7	49.3	53.4	Nevada	109,802	.4	.7	1.0
Louisiana	45,177	30.4	39.6	52.3					

*Includes Indian Territory.

Number of Villages, Towns, and Cities in the United States, 1948

Source: Buckley-Dement Advertising Corporation.

State	Population									Total
	Under 1,000	1,000 to 2,000	2,000 to 3,000	3,000 to 5,000	5,000 to 10,000	10,000 to 25,000	25,000 to 50,000	50,000 to 100,000	Over 100,000	
Alabama.....	1,285	65	45	35	18	8	3	2	1	1,462
Arizona.....	263	14	12	8	10	...	1	1	...	309
Arkansas.....	1,462	45	30	29	16	7	1	1	...	1,591
California.....	879	121	79	72	69	41	14	7	6	1,288
Colorado.....	699	3	8	11	14	6	1	1	1	744
Connecticut.....	227	52	27	21	9	14	10	2	3	365
Delaware.....	117	11	8	6	2	...	...	...	1	145
D. C.....	...	...	...	...	...	...	...	...	1	1
Florida.....	781	31	36	18	24	13	6	2	3	914
Georgia.....	1,117	60	63	20	14	16	1	4	1	1,296
Idaho.....	340	21	8	17	3	7	1	...	...	397
Illinois.....	1,694	145	102	51	69	40	15	7	2	2,125
Indiana.....	1,455	85	51	26	37	18	9	5	4	1,690
Iowa.....	1,337	86	49	40	28	11	6	4	1	1,562
Kansas.....	1,135	42	41	15	12	20	1	1	2	1,269
Kentucky.....	3,066	75	67	26	17	6	5	1	1	3,264
Louisiana.....	1,020	53	36	30	24	6	3	1	1	1,174
Maine.....	812	38	20	13	17	9	2	1	...	912
Maryland.....	945	46	26	14	15	12	3	...	1	1,062
Massachusetts.....	373	79	27	18	32	45	18	9	9	611
Michigan.....	1,502	91	70	49	42	21	7	8	3	1,800
Minnesota.....	1,399	78	55	31	20	12	1	...	3	1,599
Mississippi.....	1,179	40	26	23	12	11	1	1	...	1,293
Missouri.....	2,389	63	68	40	29	20	2	2	2	2,615
Montana.....	652	14	15	11	7	4	2	...	...	705
Nebraska.....	735	34	34	19	8	8	...	1	1	840
Nevada.....	128	6	5	4	3	1	...	...	...	147
New Hampshire.....	132	25	13	2	7	7	2	1	...	189
New Jersey.....	541	97	96	80	69	44	17	7	6	957
New Mexico.....	493	20	9	10	10	4	1	...	...	547
New York.....	2,156	185	130	65	72	59	10	6	10	2,693
North Carolina.....	851	76	63	31	24	17	4	5	1	1,072
North Dakota.....	684	30	12	2	6	3	1	...	...	738
Ohio.....	2,162	140	92	75	62	39	15	4	8	2,597
Oklahoma.....	857	45	40	30	24	17	2	...	2	1,017
Oregon.....	442	26	21	17	11	6	1	...	1	525
Pennsylvania.....	3,671	321	220	105	137	80	13	11	5	4,563
Rhode Island.....	98	14	9	4	4	7	6	1	1	144
South Carolina.....	561	57	46	27	17	7	2	2	...	719
South Dakota.....	587	22	12	9	4	5	1	...	...	640
Tennessee.....	1,740	61	28	33	20	9	2	...	4	1,897
Texas.....	2,801	132	130	54	70	29	7	7	4	3,234
Utah.....	247	31	18	15	7	2	1	...	1	322
Vermont.....	376	12	13	3	7	3	1	...	...	415
Virginia.....	1,794	41	36	30	16	8	5	3	2	1,935
Washington.....	619	39	30	20	8	10	3	...	3	732
West Virginia.....	1,894	89	62	23	15	8	3	3	...	2,097
Wisconsin.....	1,319	66	43	35	24	18	12	4	1	1,522
Wyoming.....	224	6	12	6	1	5	...	...	...	254
Total.....	51,240	2,933	2,143	1,323	1,166	751	222	115	96	59,985

Number of Families in the U. S.

Source: U. S. Bureau of the Census.

1930				1940			
Area	Number	% White	% Negro	Area	Number	% White	% Negro
Urban	17,372,524	92.1	7.6	Urban	20,648,432	91.7	8.0
Rural-nonfarm	5,927,502	91.1	8.4	Rural-nonfarm	7,225,889	92.3	7.3
Rural-farm	6,604,637	84.5	14.8	Rural-farm	7,074,345	85.8	13.5
Total	29,904,663	90.2	9.4	Total	34,948,666	90.6	9.0

Crude Birth and Death Rates of the World

(Number of births and deaths per 1,000 inhabitants¹)

Source: Statistical Office of the United Nations.

	1939		1944		1945		1946		1947	
	Births	Deaths	Births	Deaths	Births	Deaths	Births	Deaths	Births	Deaths
Australia.....	17.6	9.9	21.0	9.5 ²	21.7	9.5 ²	23.6	10.0 ²	24.0	9.7 ²
Austria.....	20.7	15.3 ³	18.6	16.0 ³	14.9	25.6 ³	15.9	13.4	18.6	13.0
Belgium.....	15.5	13.9	15.3	15.9	15.6	14.8	18.2	13.6	17.3	13.0
Bulgaria.....	21.4	13.4	22.0 ⁴	13.7 ⁴	24.1 ⁴	14.9 ⁴	25.6 ⁴	13.7 ⁴	24.0 ⁴	13.4 ⁴
Canada ⁵	20.4	9.7	23.8	9.7 ²	23.9	9.4 ²	26.9	9.4 ²	28.6	9.3 ²
Chile.....	35.2	24.6	33.2	19.5	33.3	20.0	32.4	17.2	33.8	16.7
Colombia.....	31.6	17.6	32.4	16.4	31.8	15.8	33.0	15.6	....	....
Costa Rica.....	42.3	18.3	41.3	15.6	43.6	14.4	41.7	12.9	54.3	14.2
Czechoslovakia.....	18.6	13.3	22.1	15.0	19.5	17.8	22.2	13.8	23.8	11.9
Denmark.....	17.8	10.1	22.6	10.2	23.5	10.5	23.4	10.2	22.1	9.7
Eire.....	19.1	14.2	22.2	15.3	22.4	14.3	22.9	14.0	23.1	14.9
El Salvador.....	41.1	18.1	37.5	17.5	37.7	16.0	36.1	15.5	41.2	15.0
Finland.....	21.2	14.7	21.2	18.2	25.3	13.3	27.7	12.0	27.4	11.9
France ⁶	14.6	15.3	16.4	19.8	16.2	16.6	20.6	13.3	21.0	13.0
Germany: Br. Zone.....	20.5	11.8 ³	....	....	....	....	16.1	12.4	15.7	11.3
Fr. Zone ⁷	20.5	11.9 ³	15.8	15.8 ³	12.6	19.0 ³	14.8	13.1	15.4	12.7
Hungary.....	19.6	13.7	21.0	15.4	....	....	18.4	14.7	18.7	12.3
India ⁸	32.7	21.5	25.4	24.1	27.3	21.5	27.9	17.5	....	....
Italy.....	23.6	13.4	19.3 ⁹	15.8 ⁹	18.4 ⁹	13.8 ⁹	22.5	12.0	21.7	11.3
Japan ¹⁰	26.6	17.8	29.2	17.4	23.2	29.2	25.3	17.6	34.8	14.8
Mexico.....	44.6	23.0	44.2	20.6	44.9	19.5	42.5	18.7	45.1	16.3
Netherlands.....	20.6	8.6	24.0	11.8	22.7	15.3	30.2	8.5	27.7	8.0
New Zealand ¹¹	18.7	9.2	21.6	9.9 ³	23.2	10.1 ³	25.2	9.7 ³	26.4	9.4 ³
Nicaragua.....	32.5	11.8	34.1	13.5	34.3	11.2	34.7	10.8	34.8	10.9
Norway.....	15.9	10.2	20.5	10.8	20.1	9.5	22.5	9.2	21.6	9.3
Panamá ¹²	27.8	11.3	38.9	12.6	39.4	12.3	39.1	11.4	36.4	9.5
Peru ¹².....	....	....	28.7	13.7	29.2	13.4	23.5	10.8	....	....
Portugal.....	26.2	15.3	25.0	14.8	25.7	14.2	25.0	14.7	23.9	13.3
Rumania.....	28.3	18.6	21.7 ¹³	19.6 ¹³	19.6 ¹⁴	20.0 ¹⁴	23.8 ¹⁴	18.0 ¹⁴	....	....
South Africa, U. of ¹⁵	25.3	9.4	26.6	9.3 ²	25.4	9.3 ²	26.9	8.7 ²	27.1	8.7 ²
Spain.....	16.6	18.5	22.5	13.1	23.0	12.2	21.4	12.9	21.3	11.9
Sweden.....	15.4	11.5	20.6	11.0	20.4	10.8	19.6	10.5	18.9	10.8
Switzerland.....	15.2	11.8	19.6	12.0	20.1	11.6	20.0	11.3	19.3	11.3
United Kingdom.....	15.3	12.2	17.8	11.7	16.3	11.5	19.3	11.6	20.7	12.1
United States.....	17.3	10.6	20.2	10.6 ³	19.6	10.6 ³	23.3	10.0 ³	25.8	10.1 ³
Venezuela ¹²	35.9	18.7	35.9	17.2	36.8	15.3	38.4	15.0	39.5	13.9

¹Excluding stillbirths. ²Excluding deaths among armed forces but computed on total population. ³Excluding deaths among armed forces. ⁴Including southern Dobruja. ⁵Excluding Yukon and Northwest Territories. ⁶Excluding infants born alive but who die before registration of birth. ⁷For 1939: excluding district of Sarreburg; for 1944: excluding Saar territory; for 1944-45: excluding Baden. ⁸Registration area of former British provinces only. ⁹Excluding Venezia Giulia and Zara. ¹⁰Japanese nationals in Japan proper. ¹¹Excluding Maoris. ¹²Excluding jungle population. ¹³Excluding Bessarabia, $\frac{1}{2}$ Bukovina, $\frac{1}{2}$ Transylvania, southern Dobruja, and part of Crisana. ¹⁴Excluding Bessarabia, northern Bukovina, and southern Dobruja. ¹⁵European population only.

Population of 10 Major U. S. Cities, 1860 to 1946

Source: U. S. Bureau of the Census.

Rank	City	1860	1900	1910	1920	1930	1940	Est. 1946
1	New York City.....	1,174,779*	3,437,202	4,766,883	5,620,048	6,930,446	7,454,995	7,783,000
2	Chicago, Ill.....	112,172	1,698,575	2,185,283	2,701,705	3,376,438	3,396,808	3,600,000
3	Philadelphia, Pa.....	565,529	1,293,697	1,549,008	1,823,779	1,950,961	1,931,334	2,050,000
4	Detroit, Mich.....	45,619	285,704	465,766	993,678	1,558,662	1,623,452	1,815,000
5	Los Angeles, Calif.....	4,385	102,479	319,198	576,673	1,238,048	1,504,277	1,805,687
6	Cleveland, Ohio.....	43,417	381,768	560,663	796,841	900,429	878,336	1,329,400†
7	Baltimore, Md.....	212,418	508,957	558,485	733,826	804,874	859,100	930,000
8	St. Louis, Mo.....	160,773	575,238	687,029	772,897	821,960	816,048	840,000†
9	Boston, Mass.....	177,840	560,892	670,585	748,060	781,188	770,816	766,386†
10	Pittsburgh, Pa.....	77,923	451,512	533,905	588,343	669,817	671,659	730,496†

*Population of present area. †Greater Cleveland (Cuyahoga County). ‡1945.

Estimated Population of U. S. by Color, Sex, and Age, 1945 and 1946

Source: U. S. Bureau of the Census.

Age	White males*		White females*		Nonwhite males*		Nonwhite females*	
	1945†	1946†	1945†	1946†	1945†	1946†	1945†	1946†
Under 5.....	5,887,065	6,011,177	5,630,470	5,746,550	808,328	829,122	808,207	829,724
5 to 9.....	5,008,205	5,134,559	4,807,110	4,926,486	768,868	787,703	763,535	784,533
10 to 14.....	4,725,538	4,702,891	4,570,335	4,542,828	673,857	687,426	680,300	689,495
15 to 19.....	5,207,160	5,132,840	5,065,905	4,981,181	683,942	681,326	690,616	685,986
20 to 24.....	5,369,487	5,364,302	5,434,617	5,434,818	651,152	663,755	690,226	690,978
25 to 29.....	5,008,752	5,070,868	5,228,081	5,297,872	565,842	581,608	652,910	658,194
30 to 34.....	4,836,371	4,857,547	5,005,718	5,060,287	541,117	545,057	616,972	625,648
35 to 39.....	4,535,087	4,594,025	4,619,318	4,698,605	476,317	483,501	518,789	529,573
40 to 44.....	4,197,521	4,250,491	4,231,393	4,300,290	463,408	462,853	510,063	510,738
45 to 49.....	3,883,971	3,912,148	3,876,402	3,926,001	391,704	400,721	401,430	418,691
50 to 54.....	3,652,429	3,664,831	3,584,698	3,628,492	325,950	330,626	323,976	332,393
55 to 59.....	3,197,219	3,251,789	3,092,888	3,173,485	258,405	263,171	242,063	251,144
60 to 64.....	2,481,249	2,553,031	2,454,907	2,533,881	196,553	200,696	174,994	180,471
65 to 69.....	1,864,503	1,897,570	1,933,309	1,972,922	142,238	145,280	131,647	134,034
70 to 74.....	1,329,322	1,351,389	1,450,310	1,485,252	94,941	97,288	89,720	92,473
75 and over...	1,321,030	1,363,784	1,537,598	1,600,886	100,878	106,448	118,602	124,959
Total.....	62,504,909	63,113,242	62,523,059	63,309,836	7,143,500	7,266,581	7,414,050	7,539,034
14 and over...	47,875,405	48,217,743	48,473,236	49,017,545	5,027,004	5,097,468	5,297,983	5,371,855
21 and over...	40,606,861	41,066,916	41,379,473	42,052,810	4,074,491	4,144,927	4,332,429	4,410,581
Median age...	30.0	30.1	30.5	30.7	24.9	24.9	25.6	25.7

*Including armed forces overseas.

†As of July 1. Estimates for 1946 are preliminary and subject to change. Estimates for 1945 are revised and supersede earlier figures.

Causes of Death in the United States, 1946

Source: U. S. Public Health Service.

(Figures for numbered items are totals of the sub-items below them)

Causes of death	Number*	Rate†	Causes of death	Number*	Rate†
1. Infectious and parasitic diseases:...	87,287	62.4	9. Diseases of digestive system:.....	61,031	43.6
Tuberculosis (all forms).....	50,911	36.4	Ulcer of stomach.....	5,312	3.8
Syphilis.....	12,955	9.3	Appendicitis.....	5,285	3.8
Influenza (grippe).....	8,783	6.3	Hernia.....	4,782	3.4
Other.....	14,638	10.4	Other.....	45,652	32.6
2. Cancer and other tumors:.....	188,003	134.4	10. Diseases of genito-urinary system:..	95,778	68.5
Cancer.....	182,005	130.1	Nephritis.....	81,701	58.4
Other tumors.....	5,998	4.3	Other.....	14,077	10.1
3. Rheumatism, diseases of nutrition and endocrine glands, other general diseases, and avitaminoses:.....	43,736	31.3	11. Diseases of pregnancy, childbirth, and puerperium:.....	5,153	3.7
Rheumatic diseases.....	2,921	2.1	Abortion.....	760	0.5
Diabetes mellitus.....	34,731	24.8	Other.....	4,393	3.2
Glandular diseases.....	4,590	3.3	12. Diseases of skin and cellular tissue...	926	0.7
A vitaminoses.....	1,058	.8	13. Diseases of bones and organs of movement.....	765	0.5
Other.....	436	.3	14. Congenital malformations.....	17,749	12.7
4. Diseases of blood and blood-forming organs.....	10,754	7.7	15. Diseases peculiar to first year of life:..	61,738	44.1
5. Chronic poisoning and intoxication:...	2,332	1.7	Premature birth.....	39,824	28.5
Alcoholism.....	2,209	1.6	Injury at birth.....	11,738	8.4
Chronic poisoning.....	123	.1	Other.....	10,176	7.3
6. Diseases of nervous system and sense organs.....	140,768	100.6	16. Senility.....	10,027	7.2
7. Diseases of circulatory system:.....	461,687	330.0	17. Violent or accidental deaths:.....	123,119	88.0
Heart disease (all forms).....	429,230	306.8	Suicide.....	16,152	11.5
Other.....	32,457	23.2	Homicide.....	8,784	6.3
8. Diseases of respiratory system:.....	67,184	48.0	Accidental deaths.....	98,033	70.1
Pneumonia (all forms).....	53,541	38.3	Deaths due to operations of war..	21	.0
Other.....	13,643	9.7	Legal executions.....	129	.0
			18. Ill-defined and unknown causes.....	17,580	12.6
			Total deaths for 1946.....	1,395,617	997.7

*Exclusive of stillbirths and deaths in armed forces overseas.

†Rate per 100,000 estimated population excluding armed forces overseas.

Accidental Deaths by Age, 1913 to 1947

Source: National Safety Council.

Year	0-4 years	5-14 years	15-24 years	25-44 years	45-64 years	65 years and over*	All ages
1913.....	9,800	7,450	11,950	24,350	16,450	12,500	82,500
1918.....	10,400	10,000	10,550	22,050	17,550	14,550	85,100
1923.....	9,450	9,550	11,100	21,250	17,150	15,900	84,400
1928.....	8,850	9,750	13,000	23,200	20,700	19,500	95,000
1933.....	6,948	8,195	12,225	21,005	20,819	21,740	90,932
1938.....	6,646	6,593	12,129	20,464	21,689	26,284	93,805
1942.....	7,220	6,340	13,732	21,141	20,764	26,692	95,889
1943.....	8,039	6,636	15,278	20,212	20,109	28,764	99,038
1944.....	7,912	6,704	14,750	19,115	19,097	27,659	95,237
1945.....	7,741	6,836	12,446	19,393	20,097	29,405	95,918
1946.....	7,949	6,545	13,366	20,705	20,249	29,219	98,033
1947.....	8,250	6,300	13,650	21,100	20,200	30,500	100,000

*Includes "age unknown"; in 1946 these deaths numbered only 228.

Death Rates per 1,000 Population, 1900 to 1946

Source: Federal Security Agency, Public Health Service.
(excluding stillbirths)

Age, in years	1900	1920	1930	1940*	1941*	1942*	1943*	1944*	1945*	1946*
Infants, all ages†.....	17.9	13.4	12.3	12.0	11.8	11.7	12.4	12.4	12.7	11.4
Under 1.....	179.1	103.6	77.0	61.7	58.5	53.7	48.2	48.3	46.8	51.2
1-4.....	20.5	10.3	6.0	3.1	3.0	2.6	2.8	2.5	2.2	1.9
5-14.....	3.8	2.8	1.9	1.2	1.1	1.1	1.1	1.1	1.0	1.0
15-24.....	5.9	4.8	3.5	2.3	2.3	2.3	2.6	2.8	2.7	2.1
25-34.....	8.2	6.4	4.9	3.4	3.3	3.2	3.3	3.4	3.6	2.7
35-44.....	10.7	8.2	7.5	5.9	5.8	5.7	5.6	5.4	5.6	4.9
45-54.....	15.7	12.6	13.6	12.5	12.2	12.2	12.3	11.9	11.8	11.5
55-64.....	28.7	24.6	26.6	26.0	25.4	25.1	25.6	24.8	24.7	23.9
65-74.....	59.3	54.5	55.8	54.5	53.3	52.3	54.2	52.3	51.7	50.4
75-84.....	128.3	122.1	119.1	120.2	115.4	111.3	117.8	111.5	108.7	105.2
85 and over.....	268.8	253.0	236.7	240.6	231.4	223.2	246.5	232.4	233.0	235.9
Males, all ages†.....	16.5	12.6	10.4	9.5	9.2	9.0	9.4	9.0	8.8	8.6
Under 1.....	145.4	80.7	60.7	47.7	45.8	42.0	37.5	38.1	36.4	39.2
1-4.....	19.1	9.5	5.2	2.7	2.6	2.3	2.3	2.1	1.8	1.6
5-14.....	3.9	2.5	1.5	.9	.8	.7	.8	.7	.7	.7
15-24.....	5.8	5.0	3.2	1.8	1.7	1.6	1.5	1.4	1.4	1.3
25-34.....	8.2	7.1	4.4	2.7	2.6	2.4	2.4	2.2	2.1	1.9
35-44.....	9.8	8.0	6.1	4.5	4.3	4.1	4.1	3.9	3.8	3.5
45-54.....	14.2	11.7	10.6	8.6	8.3	8.0	8.1	7.7	7.5	7.2
55-64.....	25.8	22.4	21.2	17.9	17.2	16.7	17.2	16.3	15.8	15.1
65-74.....	53.6	50.5	46.8	42.0	40.1	39.2	40.8	39.0	37.8	36.8
75-84.....	118.8	115.9	106.6	102.6	97.6	94.2	100.3	95.0	91.4	88.3
85 and over.....	255.2	244.7	221.4	222.3	208.6	204.7	225.7	216.4	214.7	221.1
Male and female, all ages†.....	17.2	13.0	11.3	10.7	10.5	10.4	10.9	10.6	10.6	10.0
Under 1.....	162.4	92.3	69.0	54.8	52.3	48.0	43.0	43.3	41.7	45.3
1-4.....	19.8	9.9	5.6	2.9	2.8	2.4	2.6	2.3	2.0	1.8
5-14.....	3.9	2.6	1.7	1.0	1.0	.9	1.0	.9	.9	.8
15-24.....	5.9	4.9	3.3	2.0	2.0	1.9	2.0	2.0	1.9	1.7
25-34.....	8.2	6.8	4.7	3.1	2.9	2.8	2.8	2.7	2.7	2.3
35-44.....	10.2	8.1	6.8	5.2	5.0	4.9	4.9	4.7	4.6	4.2
45-54.....	15.0	12.2	12.2	10.6	10.3	10.1	10.3	9.8	9.7	9.3
55-64.....	27.2	23.6	24.0	22.0	21.4	21.0	21.5	20.6	20.3	19.6
65-74.....	56.4	52.5	51.4	48.2	46.6	45.6	47.4	45.5	44.5	43.4
75-84.....	123.3	118.9	112.7	110.9	106.0	102.3	108.5	102.7	99.5	96.2
85 and over.....	260.9	248.3	228.0	230.1	218.4	212.6	234.6	223.3	222.5	227.4

*Excluding armed forces overseas. †Includes ages not reported.

Number of Births by Age and Race of Parents, U. S., 1946

Source: Federal Security Agency, Public Health Service.
(excludes stillbirths)

Age of mother	Age of father										55 & over	Not stated	All ages
	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54				
White													
10-14.....	7	271	250	90	32	15	11	8	2	2	457	1,143	
15-19.....	6	36,382	133,184	45,545	10,345	3,420	1,197	492	212	172	15,505	246,460	
20-24.....	6	9,282	355,067	397,160	107,395	28,054	8,999	3,171	1,087	710	20,190	931,121	
25-29.....	6	365	38,676	371,979	307,978	91,345	23,445	7,793	2,625	1,641	8,259	854,112	
30-34.....	2	42	2,953	41,761	229,349	181,210	55,055	16,120	5,209	2,998	3,678	538,377	
35-39.....	2	21	411	4,128	26,864	112,037	79,160	27,813	8,563	4,640	2,000	265,639	
40-44.....	..	6	43	309	1,504	7,868	26,218	18,983	7,258	3,471	611	66,277	
45-49.....	..	1	11	23	60	136	548	1,897	1,178	597	44	4,497	
50 & over.....	..	..	1	13	21	17	14	8	28	32	2	136
Not stated.....	..	54	538	808	786	459	220	107	34	27	2,856	5,887	
All ages.....	29	46,424	531,134	861,816	684,334	424,561	194,867	76,392	26,196	14,290	53,602	2,913,641	
Nonwhite													
10-14.....	10	501	210	60	21	8	3	2	3	2	1,497	2,311	
15-19.....	7	13,205	28,458	7,518	1,843	927	344	175	66	43	23,345	75,922	
20-24.....	3	1,553	41,550	40,556	12,692	5,343	2,085	984	306	226	14,870	120,161	
25-29.....	2	66	3,178	28,235	25,440	11,666	4,186	2,093	732	499	6,257	82,355	
30-34.....	1	8	356	2,804	16,159	16,076	6,852	3,026	1,225	857	3,381	50,747	
35-39.....	1	12	82	448	2,047	10,195	8,595	4,415	1,625	1,206	2,146	30,777	
40-44.....	..	3	7	31	151	616	2,931	2,583	1,085	774	587	8,761	
45-49.....	..	..	1	4	9	35	101	339	210	165	55	915
50 & over.....	..	..	2	2	..	6	6	2	20	14	7	57
Not stated.....	..	49	177	226	183	123	86	52	12	20	2,076	3,000	
All ages.....	24	15,397	74,021	79,884	58,545	44,995	25,189	13,671	5,284	3,806	54,211	375,022	

Life Expectancy in the United States

Source: U. S. Bureau of the Census.

(This table, based on the 1940 population census and deaths of 1939-41, indicates the average future lifetime in years of all individuals at the ages shown.)

Age	White Males	White Females	Negro Males	Negro Females	Age	White Males	White Females	Negro Males	Negro Females
0.....	62.8	67.3	52.3	55.6	50.....	22.0	24.7	19.1	21.0
1.....	65.0	68.9	55.9	58.5	55.....	18.3	20.1	16.6	18.4
5.....	61.7	65.6	53.0	55.4	60.....	15.1	17.0	14.4	16.1
10.....	57.0	60.9	48.3	50.8	65.....	12.1	13.6	12.2	13.9
15.....	52.3	56.1	43.7	46.1	70.....	9.4	10.5	10.1	11.8
20.....	47.8	51.4	40.0	42.0	75.....	7.2	7.9	8.2	9.8
25.....	43.3	46.8	35.7	38.2	80.....	5.4	5.9	6.6	8.0
30.....	38.8	42.2	32.1	34.4	85.....	4.0	4.3	5.3	6.4
35.....	34.4	37.7	28.5	30.7	90.....	3.1	3.2	4.2	5.0
40.....	30.0	33.3	25.1	27.2	95.....	2.4	2.5	3.2	3.7
45.....	25.9	28.9	21.9	23.9	100.....	2.0	2.0	2.3	2.7

Comparison with Other Years, White Males and Females

Years	At birth		Age 20		Age 45		Age 70	
	Males	Females	Males	Females	Males	Females	Males	Females
1900-1902*.....	48.2	51.1	42.2	43.8	24.2	25.5	9.0	9.6
1919-1921†.....	56.3	58.5	45.6	46.5	26.0	27.0	9.5	9.9
1929-1931.....	59.1	62.7	46.0	48.5	25.3	27.4	9.2	10.0
1930-1939.....	60.6	64.5	46.8	49.7	25.5	28.0	9.3	10.2
1939-1941.....	62.8	67.3	47.8	51.4	25.9	28.9	9.4	10.5

*For original death-registration area (26.2% of national population).

†For death-registration area of 1920 (80.9% of national population).

Births and Deaths, by States, 1945-46

Source: U. S. Public Health Service.

State	Births ¹				Deaths ^{1,2}			
	1945	Rate ³	1946	Rate ³	1945	Rate ⁴	1946	Rate ⁴
Alabama.....	70,321	26.8	79,863	28.8	25,513	9.4	24,727	8.8
Arizona.....	13,348	24.7	16,345	26.5	6,091	10.5	5,737	9.2
Arkansas.....	39,628	22.2	45,280	24.1	14,703	7.9	14,338	7.6
California.....	184,380	22.0	218,484	23.4	92,569	10.2	94,678	9.9
Colorado.....	23,511	23.2	29,518	26.8	12,389	11.5	12,058	10.6
Connecticut.....	33,765	19.0	41,457	21.2	18,833	10.5	19,127	9.7
Delaware.....	5,984	22.5	6,802	23.8	3,274	11.9	3,229	11.3
D.C.....	16,141	19.6	18,601	22.8	8,432	9.6	8,289	9.8
Florida.....	47,791	24.1	53,688	23.9	22,776	9.8	23,005	10.0
Georgia.....	74,852	26.3	85,667	27.7	28,559	9.4	27,511	8.8
Iaho.....	11,501	25.6	13,787	29.3	4,602	9.4	4,585	9.7
Illinois.....	138,705	19.0	174,825	22.0	90,116	12.0	89,566	11.2
Indiana.....	68,444	19.7	85,515	22.8	39,586	11.3	39,034	10.4
Iowa.....	44,934	19.0	56,186	22.1	25,876	10.8	25,758	10.1
Kansas.....	33,624	19.8	39,751	21.7	18,507	10.4	18,059	9.7
Kentucky.....	60,892	24.0	72,542	26.9	27,590	10.6	27,410	10.0
Louisiana.....	57,838	25.3	68,670	27.8	22,125	9.2	22,030	8.7
Maine.....	16,687	20.9	20,326	23.3	9,985	12.3	10,058	11.5
Maryland.....	42,791	22.5	50,347	23.9	22,584	11.2	21,783	10.0
Massachusetts.....	77,064	18.9	94,288	20.6	51,133	12.2	51,398	11.2
Michigan.....	112,655	20.3	139,277	23.0	53,966	9.7	55,167	9.1
Minnesota.....	54,656	20.9	67,266	23.9	26,763	10.2	26,937	9.5
Mississippi.....	54,263	26.7	61,690	29.7	19,355	9.1	19,417	9.2
Missouri.....	65,659	18.9	80,684	21.4	42,602	12.0	42,451	11.2
Montana.....	10,601	23.7	12,858	27.0	5,414	12.0	5,595	11.7
Nebraska.....	24,128	20.3	28,052	22.1	12,500	10.2	12,440	9.8
Nevada.....	2,851	24.2	3,283	24.6	1,588	11.2	1,502	11.1
New Hampshire.....	8,338	18.1	11,092	21.6	5,816	12.4	6,049	11.7
New Jersey.....	77,338	20.3	95,218	22.6	47,825	12.2	46,392	10.8
New Mexico.....	15,306	31.3	18,087	34.9	5,520	10.3	5,436	10.3
New York.....	234,754	18.7	286,546	20.9	153,654	12.0	152,866	11.1
North Carolina.....	87,401	26.2	100,679	28.2	28,897	8.2	28,724	7.9
North Dakota.....	13,147	25.5	15,264	28.4	5,109	9.9	5,080	9.5
Ohio.....	132,496	19.5	169,600	22.6	78,835	11.5	78,464	10.4
Oklahoma.....	43,165	21.3	50,416	22.8	18,921	8.9	18,620	8.4
Oregon.....	24,140	18.5	30,076	20.8	13,022	9.9	13,318	9.2
Pennsylvania.....	173,799	18.8	218,376	21.8	109,193	11.7	107,683	10.7
Puerto Island.....	13,635	20.3	16,761	22.8	7,985	10.9	8,073	10.8
South Carolina.....	49,431	27.4	53,963	28.7	16,904	8.8	16,351	8.6
South Dakota.....	12,460	24.2	14,580	26.7	5,481	10.1	5,508	10.1
Tennessee.....	64,966	23.4	77,336	25.9	27,946	9.9	27,650	9.2
Texas.....	157,915	25.3	181,579	26.7	58,853	8.8	59,706	8.6
Utah.....	15,680	27.3	18,220	29.2	4,859	8.1	4,785	7.5
Vermont.....	6,873	20.9	8,362	23.7	4,007	12.2	4,140	11.7
Virginia.....	67,068	25.2	75,861	26.3	28,641	9.8	28,154	9.4
Washington.....	44,573	22.0	51,988	24.0	21,890	10.1	22,011	9.8
West Virginia.....	39,039	23.1	48,673	26.9	16,630	9.8	16,238	9.0
Wisconsin.....	61,437	21.0	74,755	23.6	32,066	10.9	32,345	10.2
Wyoming.....	5,481	23.2	6,188	23.8	2,234	9.0	2,135	8.1
Total U. S.....	2,735,456	19.6	3,288,672	23.3	1,401,719	10.6	1,395,617	10.0

¹By place of residence and exclusive of stillbirths. ²Exclusive of deaths among armed forces overseas. ³Per 1,000 estimated population. Rates for U. S. based on total population including armed forces overseas; rates for states based on civilian population in area. ⁴Per 1,000 estimated population including armed forces in area.

Estimated Future Population of the U. S.

(In thousands). Source: U. S. Bureau of the Census.

Year	Male	Female	Total	Year	Male	Female	Total
1950	72,396	73,064	145,460	1970	79,189	80,657	159,847
1955	74,409	75,431	149,840	1980	81,293	82,583	163,877
1960	76,047	77,328	153,375	1990	81,861	82,724	164,585
1965	77,631	79,061	156,692	2000	81,470	81,841	163,312

Births and Deaths in the United States, 1915 to 1946

Source: Federal Security Agency, Public Health Service.

(Excluding stillbirths)

Year	Births in registration states					Deaths in registration states				
	Reg. %	Males	Females	Total	Rate ^a	Reg. %	Males	Females	Total	Rate ^a
1915....	30.9	398,615	377,689	776,304	25.0	61.6	443,928	371,572	815,500	13.2
1918....	53.4	701,164	662,485	1,363,649	24.7	76.6	784,307	645,772	1,430,079	18.
1919....	58.6	705,593	667,845	1,373,438	22.4	79.6	567,185	505,078	1,072,263	12.9
1920....	59.7	775,322	733,552	1,508,874	23.7	80.9	586,136	531,934	1,118,070	13.0
1921....	65.2	881,591	832,670	1,714,261	24.2	80.9	533,267	476,406	1,009,673	11.5
1922....	72.3	911,831	863,080	1,774,911	22.3	84.2	575,927	508,025	1,083,952	11.7
1923....	72.4	921,020	871,626	1,792,646	22.1	86.5	625,259	548,806	1,174,065	12.1
1924....	76.2	992,431	938,183	1,930,614	22.2	87.0	619,874	531,202	1,151,076	11.6
1925....	76.2	966,973	911,907	1,878,880	21.3	88.1	641,397	550,412	1,191,809	11.7
1926....	77.0	953,638	902,430	1,856,068	20.5	88.4	677,032	580,224	1,257,256	12.1
1927....	87.6	1,099,287	1,038,549	2,137,836	20.5	90.0	656,697	554,930	1,211,627	11.3
1928....	94.3	1,147,625	1,085,524	2,233,149	19.7	94.3	738,891	623,093	1,361,987	12.0
1929....	94.7	1,114,814	1,055,106	2,169,920	18.8	94.7	745,491	624,266	1,369,757	11.9
1930....	94.7	1,131,976	1,071,982	2,203,958	18.9	95.3	726,680	600,560	1,327,240	11.3
1931....	94.7	1,084,404	1,028,356	2,112,760	18.0	95.3	717,630	589,643	1,307,273	11.1
1932....	95.2	1,063,885	1,010,157	2,074,042	17.4	95.2	704,506	588,763	1,293,269	10.9
1933....	100.0	1,068,871	1,012,361	2,081,232	16.6	100.0	737,312	604,794	1,342,106	10.7
1934....	100.0	1,112,703	1,054,933	2,167,636	17.2	100.0	772,595	624,308	1,396,903	11.1
1935....	100.0	1,105,489	1,049,616	2,155,105	16.9	100.0	771,320	621,432	1,392,752	10.9
1936....	100.0	1,099,465	1,045,325	2,144,790	16.7	100.0	821,439	657,789	1,479,228	11.6
1937....	100.0	1,130,641	1,072,696	2,203,337	17.1	100.0	808,834	641,593	1,450,427	11.3
1938....	100.0	1,172,541	1,114,421	2,286,962	17.6	100.0	764,902	616,429	1,381,391	10.6
1939....	100.0	1,162,600	1,102,988	2,265,588	17.3	100.0	768,877	619,020	1,387,897	10.6
1940 ^b	100.0	1,211,684	1,148,715	2,360,399	17.9 ^a	100.0	791,003	626,266	1,417,269	10.7 ^a
1941 ^b	100.0	1,289,734	1,223,693	2,513,427	18.9 ^a	100.0	785,033	612,609	1,397,642	10.5 ^a
1942 ^b	100.0	1,444,365	1,364,631	2,808,996	20.9 ^a	100.0	780,454	604,733	1,385,187	10.4 ^a
1943 ^b	100.0	1,506,959	1,427,901	2,934,860	21.5 ^a	100.0	817,485	642,059	1,459,544	10.9 ^a
1944 ^b	100.0	1,435,301	1,359,499	2,794,800	20.2 ^a	100.0	789,861	621,477	1,411,338	10.6 ^a
1945 ^b	100.0	1,404,587	1,330,869	2,735,456	19.6 ^a	100.0	788,063	613,656	1,401,719	10.6 ^a
1946 ^b	100.0	1,691,220	1,597,452	3,288,672	23.3 ^a	100.0	785,689	609,928	1,395,617	10.0 ^a

¹Represents the percentage of the national population living in birth- and death-registration states for each year given. ²Per 1,000 population. ³Excludes deaths among armed forces overseas. ⁴Based on total population including armed forces overseas. ⁵Based on population excluding armed forces overseas.

Motor Vehicle Deaths by Type of Accident, 1913 to 1947

Source: National Safety Council.

Year	Deaths from collisions with--							Deaths from non-collision accidents*	Total deaths
	Pedestrians	Other motor vehicles	Rail-road trains	Street cars	Bi-cycles	Animal-drawn vehicle or animal	Fixed objects*		
1913.....	.....	.....	.....	...	...	...	.....	.....	4,200
1918.....	.....	.....	.....	...	...	...	.....	.....	10,700
1923.....	.....	.....	.....	...	...	...	.....	.....	18,400
1928.....	11,420	4,310	2,140	570	950	310	540	8,070	28,000
1933.....	12,840	6,470	1,437	318	400	170	900	8,680	31,363
1938.....	12,850	8,900	1,490	165	720	170	940	7,350	32,582
1942.....	10,650	7,300	1,754	124	650	240	850	6,740	28,309
1943.....	9,900	5,300	1,448	171	450	160	700	5,690	23,823
1944.....	9,900	5,700	1,663	175	400	140	700	5,600	24,282
1945.....	11,000	7,150	1,739	163	500	130	800	6,600	28,076
1946.....	11,600	9,400	1,732	174	540	130	950	8,900	33,411
1947.....	10,300	9,800	1,657	150	550	150	1,000	8,700	32,300

*Totals of deaths in fixed object collisions are considerably smaller than those shown in editions of Accident Facts prior to 1940, and death totals in non-collision accidents are larger. This is due to transferring to "non-collision" those deaths in accidents where the car left the highway and then struck a fixed object. The remaining deaths classified as "fixed objects" are those which occurred when cars struck fixed objects in roadway or immediately adjacent to rural roadway. This is in accordance with accepted accident definitions.

†The totals do not quite equal the sum of the various types because the estimates were generally made on to the nearest 10 deaths, and to the nearest 50 deaths for certain types.

Motor Vehicle Deaths by States, 1945-47

Source: National Safety Council.

NOTE: Figures are per State Registrars of Vital Statistics and indicate place of death rather than of accident.

State	1945	1946	1947	State	1945	1946	1947
Alabama	537	738	680	Nebraska	236	269	296
Arizona	295			Nevada	83	103	
Arkansas	254	355	310	New Hampshire	75	110	112
California	3,619	3,728		New Jersey	671	739	667
Colorado	277	381	364	New Mexico	199	260	254
Connecticut	261	257	247	New York	1,727	2,022	1,960
Delaware	67	83	66	North Carolina	734	1,089	907
D.C.	99	88	79	North Dakota	82	143	129
Florida	668	788	794	Ohio	1,545	1,823	1,857
Georgia	630	807	775	Oklahoma	431	514	500
Idaho	182	196	189	Oregon	309	439	413
Illinois	1,439	1,593	1,535	Pennsylvania	1,580*	1,900*	1,750*
Indiana	859	1,027	1,139	Rhode Island	92	87	97
Iowa	419	570	600	South Carolina	483	635	549
Kansas	329	452	436	South Dakota	112	177	185
Kentucky	585	712	673	Tennessee	560	673	685
Louisiana	446	473	478	Texas	1,517	1,972	2,062
Maine	162	203	187	Utah	182	203	193
Maryland	427	416	417	Vermont	55	88	63
Massachusetts	521	580	541	Virginia	647	861	724
Michigan	1,167	1,452	1,463	Washington	580	608	491
Minnesota	473	526	585	West Virginia	324	378	387
Mississippi	368	532	476	Wisconsin	624	708	756
Missouri	685	774	798	Wyoming	71	147	117
Montana	121	172	169	Total U. S.†	28,076	33,411	32,300

*Estimate, based on incomplete information. †Totals are not sums of State Figures. NOTE: Traffic authorities generally collect reports of non-fatal injury accidents and, in most cases, of property damage accidents. Comparisons from state to state lack validity, however, because of wide variation in completeness of reporting. National ratios commonly used are: 35 injuries and 150 property damage accidents for each death.

Transportation Accident Death Rates, 1945-47

Source: National Safety Council.

Kind of transportation	Mileage, in millions ¹	Passenger deaths			All deaths ⁴		
		Deaths, 1947	Rates ²		Deaths, 1947	Rates ²	
			1947	1945-47 ³		1947	1945-47 ³
Passenger operations:							
Passenger automobiles, taxis ⁵	670,000	15,300	2.30	2.50	24,500	3.70	4.00
Buses.....	66,000	140	.21	.19	900	1.40	1.40
Railroad passenger trains.....	46,000	75	.16	.17	1,809	3.90	3.00
Scheduled transport planes.....	6,313	199	3.20	2.20	217	3.40	2.50
Freight operations:							
Motor trucks.....	106,000	.....	...	...	9,200	8.70	9.70
Freight trains.....	700,000	.....	...	...	2,422	.35	.35

¹Mileage in section "Passenger operations" is passenger-miles; in section "Freight operations" it is freight-miles. ²Per 100 million miles. ³Average for the three years. ⁴All persons—pedestrians, trespassers, etc., as well as passengers—killed in operation of vehicles are included. ⁵Drivers of passenger automobiles are considered passengers.

Geographical Distribution of Accidental Deaths

Source: National Safety Council.

There was considerable variation from state to state in the 1947 accident death rates. The lowest rate for the 45 reporting states was 50.0 (deaths per 100,000 population), recorded by Connecticut. The highest rate was 122.9, recorded by Wyoming. Sixteen of the 45 states had rates below 68; 10 had rates of 68 to 80; and 10 had rates above 80.

The region with the lowest average rate (60) was the North Atlantic states. The North Central states were second, with a rate of 69, closely followed by the South Atlantic states with 70. The South Central states were not much higher, with a rate of 74. In the Pacific states the rate was 82, while in the Mountain states it jumped to 102.

Foreign and U. S. Motor Vehicle Death Rates

Source: National Safety Council.

Country	Year	Rate*	Country	Year	Rate*
Peru	1943	0.3	Sweden	1942	4.3
Costa Rica	1942	0.6	Norway	1941	4.9
Spain	1944	0.6	New Zealand	1943	8.6
Chile	1942	1.0	Northern Ireland	1943	9.0
Mexico	1941	1.1	Belgium	1944	10.2
Eire	1943	1.9	Australia	1943	10.7
Hungary	1941	2.4	Canada	1945	12.7
Venezuela	1944	2.7	Scotland	1943	14.6
Netherlands	1942	2.9	England & Wales	1941	16.5
Colombia	1940	3.6	Egypt	1943	17.3
Denmark	1944	4.0	United States	1947	22.5

*Per 100,000 population.

Deaths in Steam Railway Accidents, 1918 to 1947

Source: National Safety Council.

Year	Passengers on trains*	Travelers not on trains*	Employees on duty	Persons in grade crossing accidents	Other non-trespassers†	Trespassers	Total‡
All deaths§							
1918.....	521**		3,566	1,979	501	3,423	9,994
1923.....	149**		2,134	2,422	370	2,861	7,795
1928.....	104**		1,357	2,768	363	2,532	7,002
1933.....	47	13	571	1,638	179	3,025	5,434
1938.....	79	9	549	1,679	190	2,428	4,879
1942.....	98	21	1,043	2,117	322	2,040	5,553
1943.....	271	13	1,089	1,876	326	1,788	5,302
1944.....	259	14	1,087	2,000	315	1,549	5,146
1945.....	145	13	987	2,074	220	1,616	5,055
1946.....	115	17	736	2,025	201	1,618	4,712
1947.....	75	12	789	1,924	193	1,459	4,452

*Persons on or getting on or off passenger-carrying trains under conditions not constituting trespass are designated as "passengers on trains." Other persons lawfully on railway premises in connection with their journeys by railways are designated as "travelers not on trains."

†Death totals in this column exclude subsequent fatalities due to lack of information.

‡The sum of the items in the preceding columns exceeds the figure in the "Total" column because of duplication; e.g., employees killed in grade crossing accidents.

§Including those occurring more than 24 hours after injury.

**Deaths to passengers on trains and travelers not on trains are combined.

Principal Types of Accidental Deaths, 1913 to 1947

Source: National Safety Council.

Year	Motor vehicle	Falls	All burns*	Drowning	Rail-road	Fire-arms	Poison gases	Poisons (except gas)	All types
1913.....	4,200	18,700	9,350	10,000	12,500	2,400	3,550	3,200	82,500
1918.....	10,700	16,700	10,700	7,350	10,500	2,700	4,400	2,650	85,100
1923.....	18,400	16,800	9,550	7,000	8,100	2,950	2,800	2,950	84,400
1928.....	28,000	19,600	9,000	8,750	7,150	3,000	2,800	2,850	95,000
1933.....	31,363	21,746	7,341	7,465	5,410	3,026	1,668	2,334	90,900
1938.....	32,582	25,454	7,145	7,347	4,868	2,696	1,459	2,196	93,800
1942.....	28,309	25,460	9,010	7,120	5,454	2,741	1,760	1,800	95,800
1943.....	23,823	28,000	10,450	7,710	5,231	2,318	2,110	1,890	99,000
1944.....	24,282	26,170	10,040	7,030	5,119	2,412	1,970	2,090	95,200
1945.....	28,076	26,580	9,170	7,030	5,023	2,454	2,200	2,100	95,900
1946.....	33,411	25,650	8,790	6,940	4,640	2,816	1,930	2,050	98,000
1947.....	32,300	26,650	8,350	7,500	4,450	2,500	2,000	2,050	100,000

*Includes burns by chemicals, fire, steam, or any other hot substance; also deaths directly resulting from conflagrations, regardless of nature of injury.

Motor Vehicle Laws as of August 1, 1948

Source: American Automobile Association.

State	Speed limit (R=rea- sonable)	Date new license plates can be used	Driving license		Gasoline tax	Percent sales tax	Period of stay ¹	Safety responsi- bility law	Certifi- cate of title required
			Re- quired	Minimum age					
Alabama.....	R	Oct. 1	yes	16	\$.06	1/2 ²	Reciprocal	yes	no
Arizona.....	60	Dec.15	yes	18	.05	2	(³)	yes	yes
Arkansas.....	55	Jan. 1	yes	18	.065	2	90 days	no	no
California.....	55	Jan. 1	yes	16	.045	2 1/2	(³)	yes	yes
Colorado.....	60	On issue	yes	16	.06	2	Reciprocal	yes	yes
Connecticut.....	40	Feb.15	yes	16	.04	3	Reciprocal	yes	no
Delaware.....	55	(⁴)	yes	16	.04	...	Reciprocal	yes	yes
D. C.....	25	Mar. 1	yes	18	.04	...	Reciprocal	yes	yes
Florida.....	R	Dec. 1	yes	16	.07	...	Reciprocal	yes	yes
Georgia.....	55	Jan. 1	yes	16	.06	...	30 days	yes	no
Idaho.....	R	Jan. 1	yes	16	.06	...	Reciprocal	yes	yes
Illinois.....	R	On issue	yes	15	.03	2	Reciprocal	yes	yes
Indiana.....	R	Jan. 2	yes	16	.04	...	60 days	yes	yes
Iowa.....	R	Dec. 1	yes	16	.04	2	Reciprocal	yes	no
Kansas.....	R	Jan. 1	yes	16	.04	2	Reciprocal	yes	yes
Kentucky.....	45	Dec.29	yes	18	.07	3 ⁵	Reciprocal	yes	(⁴)
Louisiana.....	R	Dec. 1	yes	15	.09	1	Reciprocal	no	no
Maine.....	45	Dec.25	yes	15	.06	(⁷)	Reciprocal	yes	no
Maryland.....	50	Mar.15	yes	16	.05	2	Reciprocal	yes	yes
Massachusetts.....	R	Jan. 1	yes	16	.03	(⁷)	Reciprocal ⁶	(⁷)	no
Michigan.....	R	On issue	yes	16	.03	3	30 days	yes	yes
Minnesota.....	60	Dec. 1	yes	15	.04	...	Reciprocal	yes	no
Mississippi.....	55	Nov. 1	yes	17	.06	1	(²)	no	no
Missouri.....	R	Dec.31	yes	16	.02	2	Reciprocal	yes	yes
Montana.....	50	Jan. 1	yes	15	.05	...	30 days	yes	yes
Nebraska.....	60	Jan. 1	yes	16	.05	...	(²)	yes	yes
Nevada.....	R	Dec.15	yes	16	.04	...	No limit	no	yes
New Hampshire.....	R	Mar. 1	yes	16	.04	...	Reciprocal	yes	no
New Jersey.....	45	Mar. 1	yes	17	.03	...	Reciprocal	yes	yes
New Mexico.....	R	On issue	yes	14	.05	1	90 days	yes	yes
New York.....	50	Jan. 1	yes	18	.04	...	Reciprocal	yes	no
North Carolina.....	55	Dec. 1	yes	16	.06	3 ¹⁰	Reciprocal	yes	yes
North Dakota.....	50	Jan. 1	yes	16	.04	2	Reciprocal	yes	yes
Ohio.....	50	Mar. 1	yes	16	.04	3	Reciprocal	yes	yes
Oklahoma.....	R	Dec.21	yes	16	.055	2	60 days	no	yes
Oregon.....	55	Dec.15	yes	16	.05	...	Reciprocal	yes	yes
Pennsylvania.....	50	Mar.15	yes	18	.04	...	Reciprocal	yes	yes
Rhode Island.....	(¹¹)	Mar. 1	yes	16	.04	1	Reciprocal	yes	no
South Carolina.....	55	Sept. 1	yes	14	.06	...	90 days	no	no
South Dakota.....	60	Jan. 1	no	15	.04	2 ¹²	90 days	yes	yes
Tennessee.....	50	Mar. 1	yes	16	.07	2	30 days	yes	(⁴)
Texas.....	60	Feb. 1	yes	16	.04	1	Reciprocal	no	yes
Utah.....	60	Dec.15	yes	16	.04	2	60 days	yes	yes
Vermont.....	50	Mar. 1	yes	18	.045	...	Reciprocal	yes	no
Virginia.....	50	Mar.15	yes	15	.06	...	Reciprocal	yes	yes
Washington.....	50	Nov.15	yes	16	.05	3	Reciprocal	yes	yes
West Virginia.....	50	June 20	yes	16	.05	...	90 days	yes	yes
Wisconsin.....	R	On issue	yes	16	.04	...	Reciprocal	yes	yes
Wyoming.....	60	Dec. 1	yes	15	.04	2	90 days	yes	yes

¹Applies to nonresidents. The term "reciprocal" means that the state will extend to a nonresident the identical privileges granted by his home state to nonresident motorists. In some states visitors must register within a specified time. In most states persons who intend to reside permanently must buy new plates and secure new driving license at once, or within a limited period. Acquisition of employment or placing children in public school is often considered intention to reside permanently.

²None on used cars.

³Until expiration of home registration.

⁴Three months before current registration expires.

⁵Use tax on new cars, first registration of used cars.

⁶Bill of sale must be filed.

⁷Excise tax.

⁸Permit showing compliance with state compulsory liability insurance law must be obtained after 30 days.

⁹State has compulsory insurance.

¹⁰\$15 maximum.

¹¹Zoned. ¹²Registry tax on first registration in state.

Marriage Information, by State

Sources: U. S. Dept. of Labor and Federal Security Agcy., Public Health Service.

State	Legal minimum marriage age				Blood test required	Waiting period		Number of marriages, 1947 ¹	Rates ²	
	With parental consent		Without parental consent			Before license	After license		1946 ³	1947 ⁴
	M	F	M	F						
Alabama ⁵	17	14	21	18	(4)	none	none	45,960	20.1	16.3
Arizona.....	18	16	21	18	no	none	none	25,600 ⁵	43.8	39.0
Arkansas.....	18	16	21	18	no	none	none	43,652	27.3	22.9
California.....	18	16	21	18	yes	3 da.	none	94,459	11.3	9.6
Colorado ⁶	16	16	21	18	yes	none	none	15,188 ⁶	14.3	13.1
Connecticut.....	16	16	21	21	yes	5 da.	none	24,111	13.4	11.9
Delaware.....	18	16	21	18	no	none	0	5,133	28.9	17.5
D.C. ⁹	18	16	21	18	no	none	none	12,775 ⁶	17.9	14.8
Florida ⁹	18	16	21	21	yes	3 da.	none	23,959	13.0	10.0
Georgia ⁹	17	14	21	21	no	5 da.	none	68,715 ⁶	25.0	21.3
Idaho ⁹	14 ⁸	12 ⁸	18	18	yes	none	none	8,029	15.7	16.5
Illinois.....	18	16	21	18	yes	none	none	108,461 ⁶	15.2	13.2
Indiana ⁹	18	16	21	18	yes	none	none	58,537 ⁶	17.7	15.2
Iowa ⁹	16	14	21	18	yes	none	none	30,004	12.8	11.5
Kansas ⁹	18	16	21	18	no	none	none	38,141	37.3	19.9
Kentucky.....	16	14	21	21	yes	none	none	71,563 ⁶	30.1	25.8
Louisiana.....	18	16	21	21	(4)	none	none	32,909 ⁶	16.3	12.9
Maine ⁹	16	16	21	18	yes	5 da.	none	11,152	15.4	12.2
Maryland.....	18	16	21	18	no	2 da.	none	60,181 ⁶	31.8	27.2
Massachusetts.....	18	16	21	18	yes	5 da.	none	53,375	12.3	11.3
Michigan ⁹	18	16	21	18	yes	5 da.	none	71,266	13.0	11.4
Minnesota.....	18	16	21	18	no	5 da.	none	35,991 ⁶	13.6	12.4
Mississippi.....	14 ⁸	12 ⁸	21	18	no	5 da.	none	53,480	30.6	25.6
Missouri.....	15	15	21	18	yes	none	none	43,613 ⁶	12.3	11.3
Montana ⁹	18	16	21	18	no	none	none	9,765	27.1	19.8
Nebraska.....	18	16	21	21	no	none	none	14,726	11.1	11.3
Nevada.....	18	16	21	18	no	none	none	57,556 ⁶	437.1	411.1
New Hampshire.....	14	13	20	18	yes	5 da.	none	9,225	19.9	16.9
New Jersey.....	18	18	21	18	yes	3 da.	none	55,802	14.2	12.6
New Mexico.....	18	16	21	18	no	none	none	14,813	34.3	26.9
New York.....	16	14	21	18	yes	3 da.	1 da.	164,522	13.3	11.7
North Carolina.....	16	16	18	18	yes	none	none	33,800 ⁶	10.7	9.1
North Dakota.....	18	15	21	18	yes	none	none	5,547	10.3	10.0
Ohio ⁹	18	16	21	21	yes	5 da.	none	93,779	14.1	12.1
Oklahoma ⁹	18	15	21	18	yes	none	none	21,183 ⁶	10.7	9.2
Oregon.....	18	15	21	18	yes	3 da.	none	12,800 ⁵	10.1	8.4
Pennsylvania ⁹	16	16	21	21	yes	3 da.	none	105,852	12.2	10.3
Rhode Island ⁹	18	16	21	21	yes	none	none	9,337	14.3	12.3
South Carolina ⁹	18	14	18	18	no	1 da.	none	48,357 ⁶	30.7	25.2
South Dakota ⁹	18	15	21	18	yes	none	none	7,905	15.3	14.0
Tennessee ⁹	16	16	21	21	yes	3 da.	none	17,157	7.2	5.6
Texas ⁹	16	14	21	18	(4)	none	none	123,798 ⁶	20.6	17.4
Utah.....	16	14	21	18	yes	none	none	7,965 ⁶	15.4	12.5
Vermont.....	18	16	21	18	yes	none	none	4,324	14.0	11.9
Virginia.....	18	16	21	21	yes	none	none	40,350	15.6	13.4
Washington.....	14 ⁸	12 ⁸	21	18	no	3 da.	none	39,659 ⁶	20.3	17.8
West Virginia.....	18	16	21	21	yes	3 da.	none	18,655 ⁶	12.9	10.1
Wisconsin.....	18	15	21	18	yes	5 da.	none	35,527	12.3	10.8
Wyoming ⁹	18	16	21	21	yes	none	none	3,696	14.7	13.4

¹Provisional figures. ²Per 1,000 population. Based on population present in U. S., excluding armed forces overseas; estimated as of July 1 for each year. ³Revised figures. ⁴For males only. ⁵Estimated. ⁶Marriage licenses issued. ⁷Residents 24 hrs., nonresidents 96 hrs. ⁸Common-law marriage age. ⁹Common-law marriage laws valid.

The extreme variation in the marriage rates between states can be explained in terms of the enumeration of marriages by place of occurrence. Sharp revisions in rates would undoubtedly result from the allocation of marriages to a residence basis.

Only 3 states reported more marriages in 1947 than in 1946—North Dakota, Idaho and Nebraska. New York had the largest number of marriages for both years. Wyoming, the smallest. The highest rate was for Nevada; the lowest, for Tennessee.

Marital Status of the Population, 1940

(15 years old and over)

Source: U. S. Bureau of the Census.

State	Single*		Married		Widowed		Divorced	
	Male	Female	Male	Female	Male	Female	Male	Female
Alabama.....	291,246	232,468	603,014	609,036	36,637	124,988	6,936	12,478
Arizona.....	59,602	34,974	108,813	107,277	7,817	18,600	4,146	4,098
Arkansas.....	199,300	137,052	438,087	437,562	32,280	81,981	8,054	10,956
California.....	918,978	570,269	1,701,632	1,679,001	114,276	360,840	86,012	109,078
Colorado.....	132,778	92,675	261,748	260,043	20,096	49,661	8,547	9,765
Connecticut.....	240,788	214,005	390,950	389,206	28,537	71,570	4,750	6,729
Delaware.....	34,979	26,865	62,504	62,332	5,141	12,120	900	1,152
D. C.....	90,495	85,052	154,108	155,834	9,636	38,468	4,037	7,276
Florida.....	206,116	145,365	452,394	453,226	33,501	103,144	11,244	16,895
Georgia.....	330,589	266,822	671,341	679,028	41,895	154,322	8,176	14,363
Idaho.....	67,778	36,638	120,777	119,132	7,676	15,690	3,984	3,044
Illinois.....	1,013,928	803,776	1,892,349	1,884,288	139,070	355,305	43,516	57,008
Indiana.....	385,364	290,237	837,496	831,880	63,246	149,656	21,241	26,128
Iowa.....	309,801	238,801	596,167	593,452	43,472	103,351	13,372	16,002
Kansas.....	209,707	160,372	430,354	427,379	31,499	79,161	10,921	12,170
Kentucky.....	316,292	237,071	626,343	621,185	42,709	111,637	11,522	14,819
Louisiana.....	259,400	199,905	518,257	525,295	33,893	106,649	6,809	11,233
Maine.....	102,525	80,590	188,551	187,838	17,290	37,650	5,237	6,238
Maryland.....	239,221	182,883	419,021	418,094	30,552	81,796	6,705	9,125
Massachusetts.....	598,247	594,478	934,173	933,261	77,181	202,340	14,677	21,938
Michigan.....	652,094	453,648	1,254,575	1,238,505	85,063	188,627	33,547	35,891
Minnesota.....	408,015	303,569	610,648	606,429	45,242	102,954	11,571	14,721
Mississippi.....	217,339	164,617	472,066	476,379	30,495	94,849	5,726	9,794
Missouri.....	429,984	341,598	910,812	910,728	68,918	185,077	21,908	29,996
Montana.....	86,219	44,251	125,964	123,692	9,734	19,013	4,907	3,781
Nebraska.....	163,643	125,067	304,686	303,781	21,804	51,187	6,478	7,657
Nevada.....	17,889	6,208	26,992	25,510	1,856	3,622	2,013	1,311
New Hampshire.....	61,971	53,017	110,835	110,555	10,579	23,217	3,027	3,426
New Jersey.....	562,640	479,217	981,976	979,936	70,657	186,602	9,547	14,828
New Mexico.....	58,365	39,559	110,562	109,765	8,098	16,450	2,443	2,984
New York.....	1,861,537	1,598,119	3,157,750	3,149,635	226,595	625,031	31,424	51,755
North Carolina.....	408,975	343,946	731,906	737,836	39,354	130,957	6,366	11,064
North Dakota.....	98,930	64,338	128,974	128,291	9,218	17,813	1,793	1,988
Ohio.....	832,054	670,983	1,662,583	1,647,217	122,948	297,646	41,662	53,659
Oklahoma.....	246,312	171,037	536,897	533,799	36,548	93,473	15,188	20,297
Oregon.....	139,949	85,121	272,700	269,369	19,708	47,160	12,504	11,868
Pennsylvania.....	1,330,989	1,119,812	2,207,727	2,201,633	173,763	414,612	23,994	32,064
Rhode Island.....	98,973	94,789	155,316	155,763	12,281	31,552	2,620	4,252
South Carolina.....	210,968	177,937	378,717	384,446	20,913	80,995	1,848	3,295
South Dakota.....	90,923	61,205	138,578	137,808	10,017	20,752	2,539	2,710
Tennessee.....	310,391	249,825	648,394	650,230	42,492	130,028	10,904	17,574
Texas.....	699,956	502,692	1,481,163	1,476,836	95,282	272,819	36,222	53,287
Utah.....	62,174	45,330	119,795	119,555	5,826	18,368	2,749	3,548
Vermont.....	46,734	34,267	78,948	78,403	7,447	16,958	1,916	2,029
Virginia.....	341,510	254,055	573,724	572,299	37,348	111,782	8,348	11,875
Washington.....	244,035	138,440	424,749	418,969	31,920	74,409	18,658	18,489
West Virginia.....	226,188	164,932	409,892	406,304	24,814	60,687	6,353	8,446
Wisconsin.....	423,760	316,735	707,719	702,248	54,530	117,556	15,203	17,604
Wyoming.....	36,944	17,160	58,360	56,865	3,698	6,967	2,154	1,875
1940 totals.....	16,376,595	12,751,772	30,191,087	30,087,135	2,143,552	5,700,092	624,398	822,563
% of each sex.....	33.2	25.8	61.2	61.0	4.3	11.5	1.3	1.7
940 urban.....	9,218,434	8,256,093	17,488,846	17,535,268	1,195,146	3,742,439	410,037	632,292
% of each sex.....	32.6	27.4	61.8	58.1	4.2	12.4	1.4	2.1
940 rural-non farm	3,129,750	2,164,104	6,250,430	6,185,943	456,080	1,113,076	129,197	127,600
% of each sex.....	31.4	22.6	62.7	64.5	4.6	11.6	1.3	1.3
940 rural-farm.....	4,028,411	2,331,575	6,451,811	6,365,924	492,326	844,577	85,164	62,671
% of each sex.....	36.4	24.3	58.3	66.3	4.5	8.8	.8	.6
890 totals.....	8,708,130	6,250,912	11,205,205	11,124,785	815,437	2,154,598	49,100	71,883
900 totals.....	10,402,543	7,606,772	13,955,650	13,810,057	1,177,976	2,717,715	84,230	114,647
910 totals.....	12,705,653	9,001,342	18,092,600	17,684,687	1,471,390	3,176,228	156,162	185,068
920 totals.....	13,077,805	9,667,653	21,849,266	21,318,933	1,758,308	3,917,625	235,284	273,304
930 totals.....	15,039,398	11,359,038	26,327,109	26,170,756	2,025,036	4,734,207	489,478	573,148

*Includes persons of unknown marital status.

Grounds for Divorce

Source: U. S. Department of Labor.

State	Adultery	Cruelty	Desertion	Alcoholism	Impotency	Felony conviction	Neglect to provide	Insanity	Pregnancy at marriage	Bigamy	Separation	Imprisonment	Indignities	Drug addict	Violence	Others
Alabama	yes	yes	yes	yes	yes	yes	yes	yes ¹	yes	yes	yes ¹	yes	yes	yes	yes	(3)
Arizona	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes ¹	yes ¹	yes	yes	yes	yes	(2)
Arkansas	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes ⁴	yes	yes	yes	yes	
California	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes ⁴	yes	yes	yes	yes	
Colorado	yes	yes	yes	yes	yes	yes	yes	yes ¹	yes	yes	yes	yes	yes	yes	yes	(2,3,4)
Connecticut	yes	yes	yes	yes	yes	yes	yes	yes ¹	yes	yes	yes	yes	yes	yes	yes	(2,3,4)
Delaware	yes	yes	yes	yes	yes	yes	yes	yes ¹	yes	yes	yes ⁷	yes ⁷	yes	yes	yes	(2,8)
D.C.	yes	yes ⁹	yes	yes	yes	yes	yes	yes	yes	yes	yes ¹	yes	yes	yes	yes	
Florida	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	(10)
Georgia	yes	yes ¹¹	yes	yes ¹¹	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes ¹¹	(5,10,12)
Idaho	yes	yes	yes	yes	yes	yes	yes	yes ¹³	yes	yes	yes ¹	yes	yes	yes	yes	
Illinois	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes ¹	yes	yes	yes	yes	(14)
Indiana	yes	yes	yes	yes	yes	yes	yes	yes ¹	yes	yes	yes	yes	yes	yes	yes	
Iowa	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	
Kansas	yes	yes	yes	yes	yes	yes	yes	yes ¹	yes	yes	yes	yes	yes	yes	yes	(5)
Kentucky	yes	yes	yes	yes	yes	yes	yes	yes ¹	yes	yes	yes ¹	yes	yes	yes	yes	(5,14,15,16)
Louisiana	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes ⁷	yes	yes	yes	yes	(2,17)
Maine	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	
Maryland	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes ¹	yes	yes	yes	yes	
Massachusetts	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes ¹	yes	yes	yes	
Michigan	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes ¹	yes	yes	yes	
Minnesota	yes	yes	yes	yes	yes	yes	yes	yes ¹	yes	yes	yes ⁷	yes	yes	yes	yes	
Mississippi	yes	yes	yes	yes	yes	yes	yes	yes ⁴	yes	yes	yes	yes	yes	yes	yes	(10,12)
Missouri	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	(3)
Montana	yes	yes	yes	yes	yes	yes	yes	yes ¹	yes	yes	yes	yes	yes	yes	yes	
Nebraska	yes	yes	yes	yes	yes	yes	yes	yes ¹	yes	yes	yes	yes ⁴	yes	yes	yes	
Nevada	yes	yes	yes	yes	yes	yes	yes	yes ⁷	yes	yes	yes ⁴	yes	yes	yes	yes	
New Hampshire	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes ¹⁸	yes	yes	yes	(15,19)
New Jersey	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	
New Mexico	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	
New York	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	(20)
North Carolina	yes	yes	yes	yes	yes	yes	yes	yes ²¹	yes	yes	yes ⁷	yes	yes	yes	yes	(2)
North Dakota	yes	yes	yes	yes	yes	yes	yes	yes ¹	yes	yes	yes	yes	yes	yes	yes	
Ohio	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	(5,19,22)
Oklahoma	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	(5)
Oregon	yes	yes	yes	yes	yes	yes	yes	yes ¹	yes	yes	yes	yes	yes	yes	yes	
Pennsylvania	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	(3,10)
Rhode Island	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes ²¹	yes	yes	yes	yes	(23,24)
South Carolina	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	
South Dakota	yes	yes	yes	yes	yes	yes	yes	yes ¹	yes	yes	yes	yes	yes	yes	yes	
Tennessee	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	(2,25,26)
Texas	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes ²¹	yes	yes	yes	yes	
Utah	yes	yes	yes	yes	yes	yes	yes	yes ¹	yes	yes	yes ⁴	yes	yes	yes	yes	
Vermont	yes	yes	yes	yes	yes	yes	yes	yes ¹	yes	yes	yes	yes ⁴	yes	yes	yes	(6,27)
Virginia	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	(2,28)
Washington	yes	yes	yes	yes	yes	yes	yes	yes ¹	yes	yes	yes ¹	yes	yes	yes	yes	(5)
West Virginia	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	
Wisconsin	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes ¹	yes ⁴	yes	yes	yes	
Wyoming	yes	yes	yes	yes	yes	yes	yes	yes ¹	yes	yes	yes ⁷	yes	yes	yes	yes	(3,29)

¹Five years. ²Infamous crime. ³Felony before marriage. ⁴Three years. ⁵Fraudulent contract. ⁶Absence of 7 years. ⁷Two years. ⁸Female under 16, male under 18. ⁹Legal separation for cruelty which can be enlarged into an absolute divorce after 2 years. ¹⁰Relationship within prohibited degrees. ¹¹At discretion of jury. ¹²Insanity at time of marriage. ¹³Six years. ¹⁴Loathsome disease. ¹⁵Joining a religious cult disbelieving in marriage. ¹⁶Unchaste behavior of wife after marriage. ¹⁷Absence of reconciliation for 1 year after judgment of separation, or public defamation. ¹⁸One year. ¹⁹Absence of 3 years. ²⁰Marriage can be annulled under so-called Enoch Arden law if other party has been absent for 5 successive years and diligent search gives no evidence he or she is alive. ²¹Ten years. ²²The procurement of a divorce, outside the state, by a husband or wife, by virtue of which the party who procured it is relieved from the obligations of marriage while they remain binding upon the other party. ²³Absence. ²⁴Any other gross misbehavior or wickedness. ²⁵Absence of 2 years. ²⁶Refusal of wife to live with husband in the state and absenting herself 2 years. ²⁷Intolerable severity. ²⁸Wife a prostitute. ²⁹Husband a vagrant.

Divorce Information, by State

Sources: U. S. Dept. of Labor and Federal Security Agcy., Public Health Service.

State	Residence for divorce	Period before parties may remarry		Number of divorces, 1947 ¹	Rates ²	
		Plaintiff	Defendant		1946 ³	1947 ¹
Alabama.....	1 yr.	2 mo. ⁴	2 mo. ⁴	10,399	5.2	3.7
Arizona.....	1 yr.	1 yr.	1 yr.	2,400 ⁵	4.7	3.7
Arkansas.....	90 da. ⁶	none	none	9,578	7.3	5.0
California.....	1 yr.	1 yr.	1 yr.	52,300 ⁷	5.6	...
Colorado.....	1 yr.	6 mo.	6 mo.	...	...	...
Connecticut.....	3 yr.	none	none	3,454	1.9	1.7
Delaware.....	2 yr. ⁸	1 yr.	1 yr.	830	1.2	2.8
D.C.....	2 yr. ⁹	6 mo.	6 mo.	2,080	2.9	2.5
Florida.....	90 da.	none	none	20,919	11.7	8.9
Georgia.....	1 yr.	fixed by court	fixed by court	...	...	...
Idaho.....	6 wk.	6 mo.	6 mo.	3,400 ⁵	...	7.0
Illinois.....	1 yr.	none	none	...	...	...
Indiana.....	1 yr.	none	none	...	...	...
Iowa.....	1 yr.	1 yr. ¹⁰	1 yr. ¹⁰	6,742	3.9	2.6
Kansas.....	1 yr.	6 mo.	6 mo.	6,800 ⁵	5.0	3.6
Kentucky.....	1 yr.	none	none	...	...	...
Louisiana.....	1 yr.	m 1 yr.; w 22 mo.	m 14 mo. ¹¹ ; w 2 yr. ¹¹	...	...	...
Maine.....	1 yr.	none	none	2,929	4.6	3.2
Maryland.....	1 yr.	none	none	6,769	4.0	3.1
Massachusetts.....	5 yr.	6 mo.	2 yr.	10,074	2.3	2.1
Michigan.....	1 yr.	none	none ¹²	21,607	4.8	3.5
Minnesota.....	1 yr.	6 mo.	6 mo.	5,704	2.8	2.0
Mississippi.....	1 yr.	none	none ¹¹	6,999	4.6	3.4
Missouri.....	1 yr.	none	none	17,300 ⁵	7.1	4.5
Montana.....	1 yr.	none	none	2,439	6.7	5.0
Nebraska.....	2 yr. ¹³	6 mo.	6 mo.	3,306	3.7	2.5
Nevada.....	6 wk.	none	none	13,800 ⁵	146.0	99.3
New Hampshire.....	1 yr. ¹⁴	none	none	1,435	4.0	2.6
New Jersey.....	2 yr.	3 mo.	3 mo.	9,074	1.8	2.1
New Mexico.....	1 yr.	none	none	3,160	7.5	5.8
New York.....	(¹⁵)	none	3 yr. ¹⁶	...	...	...
North Carolina.....	6 mo.	none	none	6,600 ⁵	2.7	1.8
North Dakota.....	1 yr.	none ¹⁷	none ¹⁷	835	1.9	1.5
Ohio.....	1 yr.	none	none	29,263	4.7	3.8
Oklahoma.....	1 yr.	6 mo.	6 mo.	...	...	...
Oregon.....	1 yr.	6 mo.	6 mo.	6,683	7.1	4.4
Pennsylvania.....	1 yr.	none	none ¹¹	16,285	2.1	1.6
Rhode Island.....	2 yr.	6 mo.	6 mo.	1,540	2.1	2.0
South Carolina ¹⁸.....	...	...	...	...	...	...
South Dakota.....	1 yr.	none	none ¹¹	1,240	2.8	2.2
Tennessee.....	2 yr.	none	none ¹¹	9,184	4.7	3.0
Texas.....	1 yr.	none ¹⁹	none ¹⁹	43,600 ⁵	8.4	6.2
Utah.....	1 yr.	6 mo.	6 mo.	2,545	5.5	4.0
Vermont.....	6 mo.	6 mo.	2 yr. ¹⁰	751	2.9	2.1
Virginia.....	1 yr.	6 mo.	6 mo. ¹¹	6,864	3.2	2.3
Washington.....	1 yr.	none	none	10,200	6.3	4.6
West Virginia.....	2 yr. ¹³	2 mo.	2 mo. ^{11, 12}	...	...	...
Wisconsin.....	2 yr.	1 yr.	1 yr.	5,926	2.6	1.8
Wyoming.....	60 da.	none	none	1,468	6.4	5.4

¹Provisional figures. Includes reported annulments. Leaders (....) indicate data unavailable. ²Per 1,000 population. Based on civilian population; population estimates as of July 1 for each year. ³Revised figures. Leaders indicate data unavailable. ⁴If no appeal. ⁵Estimated. ⁶Divorce suits may be filed after 60-day residence, but additional 30 days must elapse before decree can be granted. ⁷1946 estimated figure. ⁸1-yr. residence for divorce based on adultery or bigamy. ⁹Residence of 1 yr. required when cause of divorce has occurred in District. ¹⁰Period can be shortened if approval of court is obtained. ¹¹One divorced for adultery may not marry the paramour, but there are exceptions to the rule in Miss., Pa., and Tenn. Special restrictions against remarriage exist in S. Dak., Va., and W. Va. ¹²Court may restrain defendant from remarrying, up to 2 yr. in Mich., up to 1 yr. in W. Va. ¹³1 yr. where cause for divorce arose within state. ¹⁴3 yr. on grounds of desertion.

¹⁵Parties must have married in state or resided there when offense was committed.

¹⁶Consent of court. ¹⁷At discretion of court.

¹⁸Laws permitting divorce repealed in 1878. Figures on annulments not available. ¹⁹Cruelty, 1 yr.

Marriages and Divorces, 1890-1947

Source: Federal Security Agency, Public Health Service.

Year	Marriages	Rate ¹	Divorces ²	Rate ¹	Year	Marriages	Rate ¹	Divorces ²	Rate ¹
1890	570,000	9.0	33,461	.5	1923	1,229,784	11.0	165,096	1.5
1895	620,000	8.9	40,387	.6	1924	1,184,574	10.4	170,952	1.5
1900	709,000	9.3	55,751	.7	1925	1,188,334	10.3	175,449	1.5
1901	742,000	9.6	60,984	.8	1926	1,202,574	10.2	184,678	1.5
1902	776,000	9.8	61,480	.8	1927	1,201,053	10.1	196,292	1.5
1903	818,000	10.1	64,925	.8	1928	1,182,497	9.8	200,176	1.7
1904	815,000	9.9	66,199	.8	1929	1,232,559	10.1	205,876	1.7
1905	842,000	10.0	67,976	.8	1930	1,126,856	9.2	195,961	1.6
1906	895,000	10.5	72,062	.8	1931	1,060,914	8.6	188,003	1.5
1907	936,936	10.8	76,571	.9	1932	981,903	7.9	164,241	1.3
1908	857,461	9.7	76,852	.9	1933 ³	1,098,000	8.7	165,000	1.3
1909	897,354	9.9	79,671	.9	1934 ³	1,302,000	10.3	204,000	1.6
1910	948,166	10.3	83,045	.9	1935 ³	1,327,000	10.4	218,000	1.7
1911	955,287	10.2	89,219	1.0	1936 ³	1,369,000	10.7	236,000	1.8
1912	1,004,602	10.5	94,318	1.0	1937	1,451,296	11.3	249,000	1.9
1913	1,021,398	10.5	91,307	.9	1938	1,330,780	10.3	244,000	1.9
1914	1,025,092	10.3	100,584	1.0	1939	1,403,633	10.7	251,000	1.9
1915	1,007,595	10.0	104,298	1.0	1940	1,595,879	12.1	264,000	2.0
1916	1,075,775	10.6	114,000	1.1	1941	1,695,999	12.7	293,000	2.2
1917	1,144,200	11.1	121,564	1.2	1942	1,772,132	13.2	321,000	2.4
1918	1,000,109	9.7	116,254	1.1	1943	1,577,050	11.8	359,000	2.6
1919	1,150,186	11.0	141,527	1.3	1944	1,452,394	11.0	400,000	2.9
1920	1,274,476	12.0	170,505	1.6	1945 ⁴	1,612,992	12.2	485,000	3.5
1921	1,163,863	10.7	159,580	1.5	1946 ⁴	2,291,045	16.4	610,000	4.3
1922	1,134,151	10.3	148,815	1.4	1947 ⁵	1,992,354	13.9	471,000	3.3

¹Per 1,000 population. For 1917-19 and 1940-47, marriage rates based on population excluding armed forces overseas, and divorce rates based on population including armed forces overseas. ²Includes annulments. ³Estimates by Samuel A. Stouffer and Lyle M. Spencer, published in *American Journal of Sociology*, Jan., 1939, pp. 551-54. ⁴Revised figures. ⁵Provisional figures.

Marriage Prospects of Single Men and Women

Source: U. S. Bureau of the Census.

Age	Percent of population single ¹		Percent who ever marry ²		Age	Percent of population single ¹		Percent who ever marry ²	
	Male	Female	Male	Female		Male	Female	Male	Female
15	99.8	98.8	92.2	93.5	31	21.0	14.7	67.5	50.8
16	99.7	96.1	92.4	93.5	32	20.9	14.7	63.0	46.4
17	99.3	91.0	92.5	93.5	33	18.6	13.0	58.5	42.1
18	97.9	82.3	92.6	93.3	34	17.2	12.6	54.1	38.0
19	94.6	73.0	92.7	92.9	35	15.3	11.2	49.7	34.3
20	89.1	62.8	92.6	92.1	36			45.6	31.0
21	81.0	54.4	92.3	90.8	37			41.6	27.9
22	72.8	46.2	91.8	89.0	38			38.1	25.2
23	62.9	38.7	90.9	86.3	39	12.6 ³	9.5 ³	34.8	22.6
24	54.3	32.9	89.6	82.8	40			31.7	20.2
25	46.9	28.6	88.0	78.5	45	11.2 ³	8.6 ³	19.1	11.3
26	40.8	25.1	85.9	73.7	50	11.0 ³	8.7 ³	11.1	6.1
27	35.0	22.0	83.4	68.9	55	10.8 ³	8.7 ³	6.2	3.2
28	30.6	20.1	80.3	64.4	60	10.5 ³	9.3 ³	3.3	1.6
29	26.2	17.7	76.6	59.9	65 and over	9.8	9.3	1.9	.8
30	25.2	17.9	72.3	55.3					

¹Percent single within the specified year of age in 1940, except as specified in footnote 3. ²Percent of persons single at beginning of year of age who marry during that year and all later years. This figure indicates the total chance of first marriage for single persons who have attained the specified age. ³Percent single in age group 40-44, 45-49, etc.; data for single years not available. NOTE: "Single" means those never married; that is, it excludes widowed and divorced. Hence, "marriage prospects" refers to likelihood of first marriage only.

World Life Expectancy

(This table, based on census figures and mortality studies, indicates the average future lifetime in years of all individuals of a country at the ages shown).

Country	Years	Sex	0	1	10	20	Age 30	40	50	60	70
Australia	1932-34	M	63.48	65.49	58.02	48.81	39.90	31.11	22.83	15.57	9.60
		F	67.14	68.67	61.02	51.67	42.77	34.04	25.58	17.74	10.98
Austria	1930-33	M	54.47	60.55	54.08	45.18	36.86	28.65	20.96	14.15	8.59
		F	58.53	63.46	56.96	48.03	39.59	31.13	22.94	15.42	9.21
Belgium	1928-32	M	56.02	61.25	54.88	46.04	37.78	29.48	21.61	14.53	8.69
		F	59.79	63.84	57.25	48.43	40.17	31.77	23.55	15.93	9.60
Brazil	1920	Both	37.43	45.26	44.28	36.33	30.34	24.36	18.61	13.33	8.76
Bulgaria	1925-28	M	45.92	54.37	53.75	45.78	38.45	30.70	23.23	16.45	10.88
		F	46.64	53.73	53.20	45.45	38.97	31.73	24.32	17.18	11.05
Canada	1940-42	M	.....	66.14	58.70	49.51	40.73	31.87	23.49	16.06	9.94
		F	.....	68.73	61.08	51.76	42.81	33.99	25.46	17.62	10.93
Costa Rica	1927	Both	40.69	49.04	46.14	37.91	30.85	24.06	17.48	11.60	7.03
Czechoslovakia	1929-32	M	51.92	59.90	54.04	45.29	37.15	28.96	21.24	14.35	8.67
		F	55.18	61.96	56.10	47.40	39.24	30.98	22.83	15.35	9.24
Denmark	1941-45	M	65.62	68.43	60.46	51.12	42.20	33.16	24.51	16.69	10.13
		F	67.70	69.63	61.52	52.03	42.91	33.88	25.16	17.14	10.38
Egypt	1917-27	M	31.00	.....	38.06	32.92	27.80	22.82	18.07	13.65	9.63
		F	36.00	.....	41.64	35.77	30.04	24.53	19.36	14.58	10.27
Eire	1940-42	M	59.01	63.23	56.25	47.24	38.92	30.58	22.53	15.37	9.60
		F	61.02	64.16	56.94	48.04	39.89	31.63	23.54	16.31	10.42
England and Wales	1937	M	60.18	63.33	56.25	47.10	38.32	29.57	21.40	14.32	8.58
		F	64.40	66.79	59.59	50.40	41.60	32.78	24.28	16.48	9.97
Finland	1931-40	M	54.45	57.95	51.73	43.34	35.89	28.12	20.86	14.57	9.51
		F	59.55	62.51	56.24	47.89	40.15	32.07	23.97	16.41	10.06
France	1933-38	M	55.94	59.52	52.57	43.62	35.52	27.71	20.43	13.92	8.50
		F	61.64	64.50	57.50	48.64	40.46	32.10	24.01	16.50	10.06
Germany	1932-34	M	59.86	64.43	57.28	48.16	39.47	30.83	22.54	15.11	9.05
		F	62.81	66.41	59.09	49.84	41.05	32.33	23.85	16.07	9.58
Greece	1928	M	49.09	53.22	52.40	44.31	37.07	29.76	22.58	16.03	10.57
		F	50.89	55.09	54.48	46.43	39.45	32.40	24.93	17.49	10.99
Hungary	1930-31	M	48.27	57.11	52.23	43.75	36.01	28.06	20.43	13.50	7.76
		F	51.34	58.78	53.96	45.77	38.30	30.35	22.35	14.95	8.72
India	1931	M	26.91	34.68	36.38	29.57	23.60	18.60	14.31	10.25	6.35
		F	26.56	33.48	33.61	27.08	22.30	18.23	14.65	10.81	6.74
Italy	1930-32	M	53.76	59.71	55.46	46.75	38.58	30.39	22.45	15.16	9.05
		F	56.00	61.32	57.15	48.49	40.41	32.14	23.89	16.13	9.61
Japan	1935-36	M	46.92	51.95	48.25	40.41	33.89	26.22	18.85	12.55	7.62
		F	49.63	54.07	50.47	43.22	36.88	29.65	22.15	15.07	9.04
Netherlands	1931-40	M	65.70	67.80	60.30	51.00	41.90	32.90	24.10	16.30	9.80
		F	67.20	68.60	60.80	51.50	42.30	33.30	24.70	16.80	10.20
New Zealand	1934-38	M	65.46	66.92	59.11	49.89	40.94	32.03	23.64	16.06	9.82
		F	68.45	69.46	61.45	52.02	42.98	34.05	25.47	17.49	10.73
Northern Ireland	1925-27	M	55.42	59.93	54.42	45.63	37.46	29.28	21.55	14.79	9.36
		F	56.11	59.48	53.73	45.22	37.42	29.65	22.18	15.55	10.20
Norway	1921-31	M	60.98	63.51	56.27	47.73	40.39	32.40	24.41	16.97	10.63
		F	63.84	65.76	58.35	49.85	42.14	34.00	25.87	18.16	11.40
Poland	1931-32	M	48.20	56.90	52.20	43.70	36.00	27.90	20.30	13.70	8.30
		F	51.40	58.70	54.00	45.70	38.00	30.30	22.40	15.10	9.20
Portugal	1939-42	M	48.58	56.21	52.61	44.00	36.04	28.23	20.76	13.86	8.19
		F	52.82	59.23	56.86	48.35	40.35	32.17	23.98	16.20	9.59
Scotland	1930-32	M	56.00	60.70	54.90	46.00	37.40	29.10	21.30	14.10	8.40
		F	59.50	63.10	57.20	48.30	39.80	31.40	23.30	15.90	9.60
South Africa (White) *	1940	M	61.46	.....	56.63	47.32	34.36	25.92	18.54	12.22	.....
		F	66.08	.....	60.08	50.96	37.67	29.04	20.98	13.63	.....
(Colored)	1935-37	M	40.18	48.14	46.53	38.78	32.10	25.69	19.74	14.08	9.49
		F	40.86	47.74	46.33	39.13	33.41	27.29	20.96	15.07	10.23
Sweden	1936-40	M	64.30	66.46	58.77	49.70	41.13	32.37	23.97	16.35	9.92
		F	66.92	68.40	60.46	51.27	42.48	33.67	25.12	17.19	10.37
Switzerland	1939-44	M	62.68	64.75	57.08	47.92	39.26	30.42	22.08	14.75	8.85
		F	66.96	68.46	60.62	51.28	42.32	33.35	24.63	16.65	9.97
U. S. S. R. (European)	1926-27	M	41.93	51.40	51.65	43.24	35.65	28.02	20.99	14.85	9.65
		F	46.79	55.46	55.72	47.36	39.75	32.12	24.41	17.07	10.96

*Uses 35, 45, 55 and 65 years as bases after 20.

Hospital Facilities in U. S., 1947

Source: American Medical Association.

State	Types of hospitals								Totals		
	General	Nervous & mental	Tuberculosis	Maternity	Industrial	Ear, eye, nose, throat	Children's	Other	Hospitals	Beds	Patients admitted
Alabama.....	76	8	8	3	..	..	1	7	103	18,144	251,928
Arizona.....	45	1	9	..	..	..	..	1	56	6,342	89,639
Arkansas.....	56	2	2	1	2	..	1	2	66	13,084	143,149
California.....	271	38	29	10	2	2	4	22	378	94,607	1,129,111
Colorado.....	66	8	12	2	2	..	1	5	96	25,469	214,209
Connecticut.....	40	16	7	1	..	..	..	14	78	22,855	232,489
Delaware.....	9	2	3	..	..	..	..	2	16	3,734	33,715
D. C.....	17	2	1	2	..	1	1	5	29	16,321	177,977
Florida.....	96	5	6	2	..	..	..	11	120	18,189	253,633
Georgia.....	100	6	3	1	2	1	1	8	122	27,228	310,695
Idaho.....	36	3	1	1	..	..	..	..	41	3,795	57,849
Illinois.....	213	31	30	6	1	3	3	30	317	91,733	996,384
Indiana.....	98	14	10	..	1	1	..	12	136	29,449	363,658
Iowa.....	106	12	5	2	1	..	..	7	133	22,188	275,771
Kansas.....	101	8	2	2	2	..	..	5	120	18,302	222,154
Kentucky.....	72	10	6	2	1	1	1	6	99	20,662	231,123
Louisiana.....	69	6	5	1	1	1	..	4	87	20,555	283,532
Maine.....	49	6	4	1	..	..	1	..	61	8,460	88,092
Maryland.....	46	17	6	..	..	3	..	10	82	26,032	237,452
Massachusetts.....	137	31	22	6	..	1	4	24	225	64,774	533,511
Michigan.....	179	22	23	4	2	1	..	23	255	64,004	640,105
Minnesota.....	159	13	15	2	..	1	1	15	206	32,448	395,693
Mississippi.....	82	6	1	..	..	..	..	3	92	11,565	171,462
Missouri.....	90	16	6	8	3	1	2	15	141	36,317	383,347
Montana.....	47	1	1	..	1	..	..	2	52	5,502	90,079
Nebraska.....	86	6	1	1	..	..	..	5	99	11,642	152,249
Nevada.....	13	1	..	..	..	..	..	..	14	1,133	19,032
New Hampshire.....	33	2	2	..	..	..	..	2	39	5,912	68,313
New Jersey.....	85	23	15	3	..	1	1	30	158	51,934	454,367
New Mexico.....	35	4	6	..	2	..	..	1	48	4,227	56,504
New York.....	327	55	51	11	2	7	5	65	523	202,040	1,686,050
North Carolina.....	125	8	19	1	1	2	1	7	164	26,765	396,987
North Dakota.....	41	2	1	1	..	..	..	1	46	6,337	89,211
Ohio.....	152	26	23	7	1	..	3	26	238	63,565	760,287
Oklahoma.....	97	7	4	2	..	..	..	7	117	16,123	204,968
Oregon.....	58	5	4	1	..	..	..	6	74	12,738	175,690
Pennsylvania.....	226	40	15	8	..	3	5	48	345	101,933	1,066,665
Rhode Island.....	13	4	4	1	..	..	..	1	23	9,233	73,447
South Carolina.....	55	3	5	..	..	1	..	3	67	12,411	191,076
South Dakota.....	46	3	2	..	..	..	..	1	52	6,416	85,212
Tennessee.....	88	12	7	..	..	6	1	11	125	23,523	292,125
Texas.....	337	17	16	3	5	4	1	14	397	51,176	798,718
Utah.....	27	2	1	1	..	..	1	1	33	4,271	77,177
Vermont.....	23	3	3	..	..	..	..	1	30	4,055	46,869
Virginia.....	94	11	7	..	1	3	..	9	125	29,991	343,873
Washington.....	89	7	11	2	..	..	..	8	117	25,593	321,098
West Virginia.....	66	7	5	..	..	..	..	5	83	13,488	217,722
Wisconsin.....	138	50	21	1	..	..	1	8	219	35,425	404,782
Wyoming.....	25	3	1	..	..	..	..	..	29	3,532	39,335
Totals, 1947...	4,539 ¹	585 ²	441 ³	100 ⁴	33 ⁵	44 ⁶	417	493 ⁸	6,276 ⁹	1,425,222	15,829,514
Totals, 1946...	4,523	575	450	101	34	46	42	509	6,280	1,468,714	15,153,452
Totals, 1945...	4,744	563	449	106	36	42	44	527	6,511	1,738,944	16,257,402
Totals, 1944...	4,833	566	453	107	39	42	44	527	6,611	1,729,945	16,036,848
Totals, 1943...	4,885	575	455	112	41	40	40	507	6,655	1,649,254	15,374,698
Totals, 1942...	4,557	586	468	113	36	42	43	500	6,345	1,383,827	12,545,610
Totals, 1938...	4,286	592	493	120	37	38	52	548	6,166	1,161,380	9,421,075
Totals, 1935...	4,257	592	496	121	52	44	51	633	6,246	1,075,139	7,717,154
Totals, 1931...	4,309	587	509	145	142	64	60	787	6,613	974,115	7,155,976

Footnotes on facing page.

Sentenced Federal Prisoners, by Offense, June 30, 1935-1947

Source: Federal Bureau of Prisons.

Offense	1935	1941	1942	1943	1944	1945	1946	1947
War-related offenses:								
Selective Service Act.....		228	1,049	3,145	3,930	2,613	1,446	833
Other national-defense laws.....		151	751	1,121	1,710	2,150	1,143	578
Military court-martial cases: { Army.....	25	100	261	511	954	1,793	2,176	2,014
{ Navy.....					8	22	40	50
Total.....	25	479	2,061	4,777	6,602	6,588	4,805	3,475
Other Federal offenses:								
Counterfeiting and forgery.....	1,848	1,289	824	522	536	673	891	1,083
Embezzlement and fraud.....	483	796	733	473	452	340	350	396
Immigration laws.....	2,509	1,695	1,428	1,466	2,674	3,996	3,629	3,989
Juvenile Delinquency Act*.....		428	478	488	834	911	1,221	870
Kidnaping.....	38	31	25	42	31	20	21	32
Liquor laws.....	12,036	10,123	8,155	3,502	2,635	2,988	2,425	1,996
National Bank and Federal Reserve Act.....	129	161	110	74	67	51	69	50
Narcotic-drug laws.....	2,115	1,596	1,522	1,241	1,306	1,134	1,261	1,447
National Motor Vehicle Theft Act.....	1,252	1,498	1,623	1,150	1,079	1,072	1,997	2,740
Theft from interstate commerce.....	333	342	178	216	362	475	448	524
White Slave Traffic Act.....	150	357	359	376	255	209	157	183
Govt. reservation, D. C., high seas terr. cases.....	700	1,139	1,112	933	991	986	873	974
Other.....	1,871	1,772	1,419	1,370	1,392	1,757	1,965	1,867
Total.....	23,464	21,227	17,966	11,853	12,614	14,612	15,307	16,151
Total all offenses.....	23,489	21,706	20,027	16,630	19,216	21,200	20,112	19,626

*Offenses committed by persons 17 years of age or under upon which action was taken under the Federal Juvenile Delinquency Act of 1938.

Methods of Execution in the United States

State	Method	State	Method
Alabama.....	Electrocution	New Mexico.....	Electrocution
Arizona.....	Lethal gas	New York.....	Electrocution
Arkansas.....	Electrocution	North Carolina.....	Lethal gas
California.....	Lethal gas	North Dakota.....	No death penalty
Colorado.....	Lethal gas	Ohio.....	Electrocution
Connecticut.....	Electrocution	Oklahoma.....	Electrocution
Delaware.....	Hanging	Oregon.....	Lethal gas
D. C.....	Electrocution	Pennsylvania.....	Electrocution
Florida.....	Electrocution	Rhode Island.....	No death penalty
Georgia.....	Electrocution	South Carolina.....	Electrocution
Idaho.....	Hanging	South Dakota.....	Electrocution
Illinois.....	Electrocution	Tennessee.....	Electrocution
Indiana.....	Electrocution	Texas.....	Electrocution
Iowa.....	Hanging	Utah.....	Hanging
Kansas.....	Hanging		or shooting
Kentucky.....	Electrocution	Vermont.....	Electrocution
Louisiana.....	Electrocution	Virginia.....	Electrocution
Maine.....	No death penalty	Washington.....	Hanging*
Maryland.....	Hanging	West Virginia.....	Hanging
Massachusetts.....	Electrocution	Wisconsin.....	No death penalty
Michigan.....	No death penalty	Wyoming.....	Lethal gas
Minnesota.....	No death penalty	U. S. (Fed. Gov't.)..	Hanging
Mississippi.....	Electrocution	Alaska.....	Hanging
Missouri.....	Lethal gas	Canal Zone.....	Hanging
Montana.....	Hanging	Hawaii.....	Hanging
Nebraska.....	Electrocution	Puerto Rico.....	No death penalty
Nevada.....	Lethal gas	Virgin Islands.....	Hanging
New Hampshire.....	Hanging		
New Jersey.....	Electrocution		

*Jury can specify whether sentence shall be death or life imprisonment.

¹Beds—patients admitted: 592,453—14,665,195; *680,913—291,954; 381,328—99,080; 45,442—100,382; *2,914—67,110; 62,534—116,563; 74,630—100,923. *Includes (hospitals—beds—patients admitted): orthopedic, 82—6,519—28,124; isolation, 65—12,556—163,300; convalescent and rest, 93—5,840—32,339; hospital departments of institutions, 194—22,516—140,276; all others, 59—7,577—34,268. *Classification by control: federal, 401; state, 563; county, 526; city, 369; city-county, 58; church, 1,051; nonprofit associations, 1,965; individual and partnership, 984; corporation (profit unrestricted), 359.

Distribution of Arrests by Sex, 1947

Source: Federal Bureau of Investigation.

Offense charged	Males	Percent	Females	Percent	Total	Percent
Criminal homicide.....	5,831	0.9	740	1.0	6,571	0.9
Robbery.....	20,545	3.1	964	1.3	21,509	2.9
Assault.....	52,635	8.0	5,459	7.2	58,094	7.9
Burglary—breaking or entering.....	37,093	5.6	1,035	1.4	38,128	5.2
Larceny— theft.....	56,237	8.5	7,976	10.6	64,213	8.8
Auto theft.....	17,881	2.7	413	0.5	18,294	2.5
Embezzlement and fraud.....	15,621	2.4	1,711	2.3	17,332	2.4
Stolen property; buying, receiving, etc.....	2,919	0.4	270	0.4	3,189	0.4
Arson.....	928	0.1	101	0.1	1,029	0.1
Forgery and counterfeiting.....	7,256	1.1	1,026	1.4	8,282	1.1
Rape.....	9,742	1.5	...	...	9,742	1.3
Prostitution and commercialized vice.....	3,896	0.6	5,816	7.7	9,712	1.3
Other sex offenses.....	14,495	2.2	3,383	4.5	17,878	2.4
Narcotic drug laws.....	3,056	0.5	332	0.4	3,388	0.5
Weapons; carrying, possessing, etc.....	11,753	1.8	586	0.8	12,339	1.7
Offenses against family and children.....	12,335	1.9	766	1.0	13,101	1.8
Liquor laws.....	6,403	1.0	1,120	1.5	7,523	1.0
Driving while intoxicated.....	36,772	5.6	1,553	2.1	38,325	5.2
Road and driving laws.....	7,283	1.1	132	0.2	7,420	1.0
Parking violations.....	95	*	...	...	95	*
Other traffic and motor vehicle laws.....	6,786	1.0	192	0.3	6,978	1.0
Disorderly conduct.....	44,014	6.7	6,826	9.1	50,840	6.9
Drunkenness.....	158,973	24.1	15,749	20.8	174,722	23.9
Vagrancy.....	35,697	5.4	7,790	10.3	43,487	5.9
Gambling.....	14,920	2.3	1,161	1.5	16,081	2.2
Suspicion.....	41,999	6.4	5,030	6.7	47,029	6.4
Not stated.....	5,838	0.9	778	1.0	6,616	0.9
All other offenses.....	27,642	4.2	4,482	5.9	32,124	4.4
Total arrests, 1947.....	658,650	100.0	75,391	100.0	734,041	100.0

Arrests by Age Groups, 1947

Age	Arrests	Age	Arrests	Age	Arrests	Age	Arrests	Age	Arrests
Under 15....	3,879	18.....	25,520	22.....	33,465	30 34.....	95,023	50 and over..	70,842
15.....	3,855	19.....	28,532	23.....	31,074	35-39.....	84,350	Not known...	3,097
16.....	10,081	20.....	29,433	24.....	28,636	40-44.....	67,682		
17.....	16,561	21.....	33,776	25-29.....	119,357	45-49.....	48,878		

Total Arrests for Previous Years

Year	Arrests	Year	Arrests	Year	Arrests	Year	Arrests
1939.....	576,920	1941.....	630,568	1943.....	490,764	1945.....	543,852
1940.....	609,013	1942.....	585,988	1944.....	488,979	1946.....	645,431

*Less than 1/10 of 1 percent.

Major Crimes in the U. S. for 1947

Source: Federal Bureau of Investigation.

During each hour of 1947 on the average, 12 persons were raped, feloniously assaulted, or killed. During the same time, 49 others were held up and robbed or had their places burglarized, and 21 others had their cars stolen. In addition to these crimes, there were 108 other thefts committed every average hour. A serious crime

was recorded in the U. S. every 18.9 seconds during the year.

It is estimated that there were 1,665,110 major crimes in the U. S. for 1947. These crimes were: murder and nonnegligent manslaughter (7,760), manslaughter by negligence (5,770), rape (17,180), robbery (68,100), aggravated assault (74,690), burglary (373,450), larceny (943,430), and auto theft (184,730).

The National Park System of the United States

The National Park System of the United States, administered by the National Park Service, a bureau of the Department of the Interior, embraces a total of 174 areas, containing approximately 20,816,699 acres in federal ownership. Started with the establishment of Yellowstone National Park in 1872, the system includes not only the most extraordinary and spectacular scenic exhibits in the United States proper and in Alaska and Hawaii but also a large number of sites distinguished for their historic or pre-historic importance or scientific interest. The number and extent of the various types of areas which comprise the system, as of June 30, 1948, are as follows:

Type of area	Number	Federal land (acres)	Lands within exterior boundaries not federally owned (acres)	Total lands within exterior boundaries (acres)
National Parks.....	28	11,347,268.52	330,143.70	11,677,412.22
National Historical Parks.....	5	10,207.03	6,044.09	16,251.12
National Monuments.....	86	9,279,368.10	412,223.86	9,691,591.96
National Military Parks.....	11	24,028.20	3,260.73	27,288.93
National Battlefield Parks.....	2	3,778.65	800.00	4,578.65
National Memorial Parks.....	1	58,341.26	12,028.40	70,369.66
National Battlefield Sites.....	6	188.32	547.65	735.97
National Historic Sites.....	12	2,874.74	2,219.95	5,094.69
National Memorials.....	9	2,006.84	90.00	2,096.84
National Cemeteries.....	10	217.01	5.00	222.01
National Parkways.....	3	59,396.74	44,570.89	103,967.63
National Capital Parks.....	1	29,023.42	1,500.00	30,523.42
Total.....	174	20,816,698.83	813,434.27	21,630,133.10

National Parks

Source: National Park Service.

Name, location and year established	Area in U. S. ownership, acres	Outstanding characteristics
Acadia (Maine), 1919.....	28,308.35	Rugged seashore on Mt. Desert Island and adjacent mainland
Big Bend (Texas), 1944.....	691,338.95	Mountains and desert bordering the Rio Grande
Bryce Canyon (Utah), 1928.....	36,010.38	Area of grotesque eroded rocks brilliantly colored
Carlsbad Caverns (N. Mex.), 1930.....	45,526.59	One of the world's largest known caves; spectacular flight of bats daily, in summer
Crater Lake (Oregon), 1902.....	160,290.33	Deep blue lake in crater of inactive volcano
Everglades (Florida), 1947.....	271,007.80	Sub-tropical area with abundant bird and animal life
Glacier (Montana), 1910.....	997,247.85	Rocky mountains with many glaciers and lakes
Grand Canyon (Arizona), 1919.....	645,295.91	Mile deep gorge, 4 to 18 miles wide, 217 miles long, of which 105 miles are within the park; fantastically sculptured
Grand Teton (Wyoming), 1929.....	94,892.92	Picturesque range of high mountain peaks
Great Smoky Mts. (N. C.-Tenn.), 1930	461,003.79	Highest mountain range east of Black Hills; luxuriant foliage
Hawaii (Territory Hawaii), 1916.....	173,404.60	Spectacular volcanic area with two active volcanoes
Hot Springs (Arkansas), 1921.....	1,019.13	47 mineral hot springs said to have therapeutic value
Isle Royale (Michigan), 1940.....	133,838.51	Largest wilderness island in Lake Superior; great moose herd
Kings Canyon (California), 1940.....	452,904.82	Huge canyons; high mountains; giant sequoias
Lassen Volcanic (California), 1916.....	103,269.28	Only recently active volcano in United States proper
Mammoth Cave (Kentucky), 1936.....	50,584.58	Vast limestone labyrinth with underground river
Mesa Verde (Colorado), 1906.....	51,017.87	Best preserved pre-historic cliff dwellings in United States
Mount McKinley (Alaska), 1917.....	1,939,319.04	Highest mountain in North America; large glaciers; big game
Mount Rainier (Washington), 1899.....	241,524.77	Greatest single-peak glacial system in United States
Olympic (Washington), 1938.....	846,718.71	Finest mountain wilderness of Pacific Northwest
Platt (Oklahoma), 1906.....	911.97	Cold mineral springs with distinctive properties
Rocky Mountain (Colorado), 1915.....	252,788.28	Section of the Rocky Mountains; 65 peaks over 10,000 feet
Sequoia (California), 1890.....	385,100.13	Groves of giant sequoias; world's largest and probably oldest living things; includes Mt. Whitney, highest mountain in U. S. proper
Shenandoah (Virginia), 1935.....	193,472.98	Tree covered mountains; scenic Skyline Drive
Wind Cave (South Dakota), 1903.....	26,582.75	Limestone caverns in Black Hills; buffalo herd
Yellowstone (Wyoming-Montana-Idaho), 1872	2,213,206.55	World's greatest geyser area; spectacular falls and canyon
Yosemite (California), 1890.....	756,440.62	Mountains; inspiring gorges and waterfalls; giant sequoias
Zion (Utah), 1919.....	94,241.06	Multicolored gorge in heart of southern Utah desert

National Historical Parks

Name and location	Acreage in U. S. ownership
Abraham Lincoln (Kentucky)	116.50
Chalmette (Louisiana)	33.25
Colonial (Virginia)	7,233.46
Morristown (New Jersey)	958.37
Saratoga (New York)	1,865.45

National Monuments

Ackia Battleground (Mississippi)	49.15
Andrew Johnson (Tennessee)	17.08
Appomattox Court House (Va.)	968.25
Arches (Utah)	33,769.94
Aztec Ruins (New Mexico)	27.14
Badlands (South Dakota)	122,972.46
Bandelier (New Mexico)	27,048.89
Big Hole Battlefield (Montana)	200.00
Black Canyon of the Gunnison (Colo.)	13,176.02
Cabrillo (California)	.50
Canyon de Chelly (Arizona)	83,840.00
Capitol Reef (Utah)	33,068.74
Capulin Mountain (New Mexico)	680.42
Casa Grande (Arizona)	472.50
Castillo de San Marcos (Florida)	18.51
Castle Pinckney (South Carolina)	3.50
Cedar Breaks (Utah)	6,172.20
Chaco Canyon (New Mexico)	18,039.39
Channel Islands (California)	1,119.98
Chiricahua (Arizona)	10,529.80
Colorado (Colorado)	18,120.55
Craters of the Moon (Idaho)	47,210.67
Custer Battlefield (Montana)	765.34
Death Valley (California)	1,850,565.20
Devil Postpile (California)	798.46
Devils Tower (Wyoming)	1,193.91
Dinosaur (Utah-Colorado)	190,798.49
El Morro (New Mexico)	240.00
Father Millet Cross (New York)	.01
Fort Frederica (Georgia)	74.53
Fort Jefferson (Florida)	86.82
Fort Laramie (Wyoming)	214.41
Fort Matanzas (Florida)	227.76
Fort McHenry (Maryland)	47.64
Fort Pulaski (Georgia)	5,427.39
Fort Sumter (South Carolina)	2.40
Fossil Cycad (South Dakota)	320.00
George Washington Birthplace (Virginia)	393.68
Gila Cliff Dwellings (N. Mex.)	160.00
Glacier Bay (Alaska)	2,297,456.27
Grand Canyon (Arizona)	196,051.00
Gran Quivira (New Mexico)	450.94
Great Sand Dunes (Colorado)	35,908.19
Holy Cross (Colorado)	1,392.00
Homestead (Nebraska)	162.73
Hovenweep (Utah-Colorado)	299.34
Jackson Hole (Wyoming)	173,064.62
Jewel Cave (South Dakota)	1,274.56
Joshua Tree (California)	655,961.33
Katmai (Alaska)	2,697,590.00
Lava Beds (California)	46,027.56
Lehman Caves (Nevada)	640.00
Meriwether Lewis (Tennessee)	300.00
Montezuma Castle (Arizona)	783.09

National Monuments, cont.

Name and location	Acreage in U. S. ownership
Mound City Group (Ohio)	57.00
Muir Woods (California)	424.56
Natural Bridges (Utah)	2,649.70
Navajo (Arizona)	360.00
Ocmulgee (Georgia)	683.48
Old Kasaan (Alaska)	38.00
Oregon Caves (Oregon)	480.00
Organ Pipe Cactus (Arizona)	328,161.73
Perry's Victory Memorial (Ohio)	14.25
Petrified Forest (Arizona)	85,303.63
Pinnacles (California)	12,817.77
Pipe Spring (Arizona)	40.00
Pipestone (Minnesota)	115.60
Rainbow Bridge (Utah)	160.00
Saguaro (Arizona)	53,669.24
Scotts Bluff (Nebraska)	2,196.44
Shoshone Cavern (Wyoming)	212.37
Sitka (Alaska)	57.00
Statue of Liberty (New York)	10.38
Sunset Crater (Arizona)	3,040.00
Timpanogos Cave (Utah)	250.00
Tonto (Arizona)	1,120.00
Tumacacori (Arizona)	10.00
Tuzigoot (Arizona)	42.67
Verendrye (North Dakota)	253.04
Walnut Canyon (Arizona)	1,641.62
Wheeler (Colorado)	300.00
White Sands (New Mexico)	140,247.04
Whitman (Washington)	45.84
Wupatki (Arizona)	34,853.03
Yucca House (Colorado)	9.60
Zion (Utah)	33,920.75

National Military Parks

Chickamauga and Chattanooga (Ga.-Tenn.)	8,149.36
Fort Donelson (Tennessee)	102.54
Fredericksburg and Spotsylvania County Battlefields Memorial (Virginia)	2,420.71
Gettysburg (Pennsylvania)	2,463.46
Gullford Courthouse (N. C.)	148.83
Kings Mountain (South Carolina)	4,012.00
Moore's Creek (North Carolina)	30.00
Petersburg (Virginia)	1,324.62
Shiloh (Tennessee)	3,729.26
Stones River (Tennessee)	323.86
Vicksburg (Mississippi)	1,323.56

National Memorial Park

Theodore Roosevelt (N. Dak.)	58,341.26
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National Battlefield Parks

Kennesaw Mountain (Georgia)	3,094.21
Richmond (Virginia)	684.44

National Battlefield Sites

Antietam (Maryland)	183.32
Brices Cross Roads (Mississippi)	1.00
Cowpens (South Carolina)	1.00
Fort Necessity (Pennsylvania)	2.00

National Historic Sites

Name and location	Acreage in U. S. ownership
Tupelo (Mississippi)	1.00
White Plains (New York)	.00
Adams Mansion (Massachusetts)	4.05
Atlantic Campaign (Georgia)	20.96
Federal Hall Memorial (New York)	.49
Fort Raleigh (North Carolina)	16.45
Hampton (Maryland)	43.30
Home of Franklin D. Roosevelt (New York)	33.23
Hopewell Village (Pennsylvania)	848.06
Jefferson National Expansion Memorial (Missouri)	82.58
Manassas National Battlefield Park (Virginia)	1,604.57
Old Philadelphia Custom House (Pennsylvania)	.79
Salem Maritime (Massachusetts)	8.61
Vanderbilt Mansion (New York)	211.65

National Memorials

House where Lincoln died (D.C.)	.05
Kill Devil Hill (N. C.)	314.40
Lee Mansion (Virginia)	2.71
Lincoln Memorial (D.C.)	.61
Lincoln Museum (D.C.)	.18
Mount Rushmore (South Dakota)	1,686.40

National Memorials—(cont.)

Name and location	Acreage in U. S. ownership
New Echota Marker (Georgia)	.92
Thomas Jefferson (D.C.)	1.20
Washington Monument (D.C.)	.37

National Cemeteries

Antietam (Maryland)	11.36
Battleground (District of Columbia)	1.03
Fort Donelson (Tennessee)	15.34
Fredericksburg (Virginia)	12.00
Gettysburg (Pennsylvania)	15.55
Poplar Grove (Virginia)	8.72
Shiloh (Tennessee)	10.25
Stones River (Tennessee)	20.09
Vicksburg (Mississippi)	119.76
Yorktown (Virginia)	2.91

National Parkways

Blue Ridge (Va.-N. C.)	42,850.08
George Washington Memorial (Va.-Md.)	2,897.79
Natchez Trace (Miss.-Ala.-Tenn.)	13,648.87

National Capital Parks

National Capital Parks (D.C.-Va.-Md.)	29,023.42
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Elevations of Leading U. S. Health or Pleasure Resorts

Location	Feet	Location	Feet
Albuquerque, New Mexico	4,950	Lake Winnepesaukee, New Hampshire	504
Asheville, North Carolina	1,985	Las Vegas, New Mexico	6,714
Atlantic City, New Jersey	21	Los Angeles, California	300
Bar Harbor, Maine	240	Luray, Virginia	819
Carlsbad, New Mexico	3,102	Marfa, Texas	4,695
Carson City, Nevada	4,660	Miami, Florida	11
Chautauqua Lake, New York	1,308	Monterey, California	360
Cheyenne, Wyoming	6,060	Moosehead Lake, Maine	1,023
Coeur d'Alene Lake, Idaho	2,131	Natural Bridge, Virginia	736
Colorado Springs, Colorado	5,980	Niagara Falls, New York	603
Concord, New Hampshire	244	Oneida Lake, New York	370
Crawford Notch, New Hampshire	1,891	Palm Beach, Florida	20
Delaware Water Gap, Pennsylvania	350	Pasadena, California	828
Denver, Colorado	5,280	Pensacola, Florida	39
Flagstaff, Arizona	6,894	Phoenix, Arizona	1,083
Glenwood Springs, Colorado	5,748	Reno, Nevada	4,490
Grand Canyon So. Rim, Arizona	6,866	St. Petersburg, Florida	41
Hot Springs, Arkansas	607	Salt Lake City, Utah	4,390
Hot Springs, South Dakota	3,443	San Angelo, Texas	1,847
Hot Springs, Virginia	2,195	San Antonio, Texas	660
Jackson Lake, Wyoming	6,733	San Bernardino, California	1,049
Keene, New Hampshire	487	Santa Barbara, California	500
Lake Champlain, New York	95	Santa Fe, New Mexico	6,950
Lake Erie	572	Saranac Lake, New York	1,535
Lake George, New York	322	Saratoga Springs, New York	314
Lake Hopatcong, New Jersey	926	Schroon Lake, New York	807
Lake Huron	581	Sebago Lake, Maine	276
Lake Michigan	581	Skyland, Virginia	3,606
Lake Ontario	246	Tampa, Florida	72
Lake Placid, New York	1,864	Tucson, Arizona	2,375
Lake Superior	602	Tupper Lake, New York	1,556
Lake Tahoe, California-Nevada	6,225	White Sulphur Springs, W. Va.	1,917

EDUCATION

Elementary and Secondary Public School Statistics, by State, 1946-47

Source: Information Please Almanac Questionnaire.

NOTE: The number of schools includes rural and one-room school houses. The number of pupils includes only full-time students. The number and salary of teachers do not include supervisors and the school principal unless indicated. The average yearly expenditure is based on the average daily attendance.

State	Elementary			Secondary			Av. yearly expenditure per pupil	Average yearly salary of teachers
	No. schools	No. pupils	No. teachers	No. schools	No. pupils	No. teachers		
Alabama.....	3,703 ¹	435,818	12,439	126	213,076	7,445	\$ 72.76	\$1,398.00
Arizona.....	424	111,767	3,215	67	27,910	1,088	154.56	3,171.00 ²
Arkansas.....	3,541	238,169	8,186	632	97,719	4,174	65.79	1,224.00
California ³	3,491	1,071,363	26,724	693	362,822	18,466	169.21	2,987.00 ⁴
Colorado ⁵	1,899	141,979	6,144	286	47,510	2,160	119.52	1,775.00
Connecticut.....	765	178,863	4,988	126	73,832	3,264	163.00	2,487.00
Delaware.....	143	25,692	861	39	16,736	782	164.44	2,118.00
Florida.....	1,671	271,313	8,469	770	167,176	5,866	117.12	1,939.40
Georgia.....	3,012	587,361	15,778	1,287	155,840	6,361	126.42 ⁶	1,922.90 ¹⁰
Idaho.....	929	77,589	2,751	185	35,292	1,485	117.58	2,077.68
Illinois ⁶	6,778	799,057	31,722	4,273	328,842	14,925	177.07	2,443.77
Indiana.....	2,492	457,706	12,403	911	169,702	10,497	158.90	2,127.83
Iowa ⁷	8,149	364,552	15,689	964	113,986	6,136	143.88	1,676.00 ⁴
Kansas.....	4,564	205,006	8,737	635	111,936	5,407	138.12	1,811.00
Kentucky.....	5,116	455,741	12,436	576	89,735	4,978	75.00	1,525.00 ⁴
Louisiana.....	2,334	372,253	10,576	516	65,791	8,425	121.11	1,901.07
Maine.....	1,408	115,978	4,292	219	35,617	1,730	117.26	1,543.36 ⁸
Maryland.....	896	201,184	5,490	223	99,370	4,084	117.85	2,445.88 ⁴
Massachusetts ⁴	1,771	347,152	13,277	453	210,529	13,299	152.88	2,671.00
Michigan.....	4,126	607,280	19,938	596	352,214	12,636	189.01	2,609.41
Minnesota.....	8,124	328,582	11,865	645	164,605	7,994	151.00	2,880.00 ⁴
Mississippi.....	3,785	470,012	10,987	749	76,840	3,319	44.81	1,234.49
Missouri.....	7,169	460,093	16,899	765	146,326	6,297	136.21	1,793.00
Montana ⁶	1,405	72,679	3,383	182	24,786	1,359	221.25	2,580.00
Nebraska.....	5,121	162,163	8,715	516	63,529	3,188	162.47	1,784.00
Nevada.....	208	20,378	79	41	6,236	290	132.51 ⁷	2,618.00
New Hampshire.....	535	46,607	1,612	82	17,464	1,115	152.20	1,842.10
New Jersey.....	1,547	437,476	14,908	251	210,221	9,708	212.80	2,745.20
New Mexico ³	694	106,383	(*)	133	22,149	(*)	134.60	1,970.00 ⁴
New York.....	5,688	1,283,601	45,980	992	582,059	27,706	231.02	3,271.00 ⁴
North Carolina ⁶	3,300	690,000	20,000	965	170,000	6,200	105.00	2,016.00
North Dakota.....	3,079	85,923	4,639	422	27,361	1,842	137.74	1,573.39 ⁴
Ohio.....	3,200	702,650	22,002	1,233	405,807	17,748	156.30	2,286.00
Oklahoma ⁶	2,618	353,608	11,422	824	155,090	6,664	107.57	2,209.00 ⁴
Oregon.....	1,228	179,049	2,895	233	64,662	1,755	177.16	2,305.00
Pennsylvania.....	7,228	914,047	29,938	1,216	568,765	23,127	150.62	2,050.00
Rhode Island.....	304	57,020	2,003	64	37,391	1,835	153.02	2,400.00
South Carolina.....	3,444	358,140	11,428	464	98,815	4,066	79.00	1,330.00
South Dakota.....	3,837	84,191	5,322	284	29,425	1,716	145.36	1,672.00
Tennessee.....	4,850	495,673	14,923	547	119,132	5,067	80.60	1,454.60
Texas.....	6,032	971,933	28,614	2,186	283,912	15,444	147.00	1,848.00
Utah.....	328	86,200	2,344	129	57,918	1,975	144.73	2,188.61
Vermont.....	913	39,681	1,748	81	14,874	759	141.13	1,600.00
Virginia.....	3,083	427,404	11,171	510	137,670	4,643	106.55	1,901.00
Washington.....	1,158	237,201	2,409	364	136,231	2,797	192.39	2,659.36
West Virginia ⁶	4,146	291,436	10,151	380	131,814	5,419	136.71	2,364.00
Wisconsin ⁹	6,221	345,381	14,039	504	138,975	6,146	147.73	2,002.00 ⁴
Wyoming.....	686	40,095	1,768	117	13,302	894	190.00	2,370.00

¹Of which 1,784 are combined Elementary, Junior High and High schools. ²Average for Elementary schools; for High schools it is \$3,570 (including principal and supervisors). ³1945-46. ⁴Includes salaries of the principal and supervisors. ⁵Elementary school salaries; the average for Secondary school teachers is \$2,229.48 (including principal and supervisors). ⁶1947-48. ⁷For Elementary school students; it is \$254.03 for Secondary school students. ⁸There are 4,290 Elementary and Secondary teachers. ⁹For white pupils; it is \$54.56 for colored pupils. ¹⁰For white teachers; it is \$1,265.67 for colored teachers.

It is estimated that for the fiscal year 1948, funds amounting to considerably more than \$2,000,000,000 were made available for education, or closely related purposes, by the Federal government for distribution to the States and Territories, or

to individual schools within them. In addition, about \$11,000,000 from special revenues, such as national forest receipts, were paid at least in part for the benefit of schools to those states within whose boundaries such revenues were derived.

State Compulsory Attendance Laws, Pupils per Teacher and Expenditures

State	Date of enactment	Age limits	Minimum period of compulsory attendance	Avg. no. of days attended*	Expenditures*
Alabama.....	1915	7-16	100 days	141.7	\$ 39,054,311
Arizona.....	1899	8-16	Full school year	147.9	14,839,650
Arkansas.....	1909	7-16	Three-fourths school year	133.9	22,958,718
California.....	1874	8-16	Full school year	144.4	221,434,748
Colorado.....	1889	8-16	Full school year	150.4	25,860,694
Connecticut.....	1872	7-16	Full school year	159.5	41,174,478
Delaware.....	1907	7-17	160 days	158.8	5,724,414
D. C.....	1864	7-16	Full school year	146.8	14,030,917
Florida.....	1915	7-16	Full school year	158.0	38,970,351
Georgia.....	1945	7-16	120 days	145.8	40,101,632
Idaho.....	1887	8-18	Full school year	152.4	11,686,846
Illinois.....	1883	7-16	Full school year	161.6	178,814,939
Indiana.....	1897	7-16	Full school year	141.6	81,692,497
Iowa.....	1902	7-16	120 days	148.3	59,525,447
Kansas.....	1874	7-16	Full school year	142.6	41,499,954
Kentucky.....	1896	7-16	Full school year	131.1	38,033,240
Louisiana.....	1910	7-16	140 days	145.9	39,990,873
Maine.....	1875	7-17	Full school year	161.4	14,768,556
Maryland.....	1902	7-16	Full school year	160.3	35,116,005
Massachusetts.....	1852	7-16	Full school year	153.8	93,223,769
Michigan.....	1871	6-16	Full school year	161.8	134,014,926
Minnesota.....	1885	8-16	Full school year	148.0	64,666,587
Mississippi.....	1918	7-16	80 days	139.6	21,079,932
Missouri.....	1905	7-16	Full school year	154.5	78,573,377
Montana.....	1883	8-16	Full school year	148.4	18,316,325
Nebraska.....	1887	7-16	120 days	153.1	29,477,988
Nevada.....	1873	7-18	Full school year	145.5	3,426,615
New Hampshire.....	1871	8-16	Full school year	151.6	8,153,521
New Jersey.....	1947	7-17	Full school year	156.6	120,016,959
New Mexico.....	1947	6-17	Full school year	138.4	13,819,801
New York.....	1874	7-16	Full school year	149.2	351,710,645
North Carolina.....	1946	7-16	Full school year	159.0	63,477,448
North Dakota.....	1883	7-17	Full school year	148.9	14,594,084
Ohio.....	1877	6-18	Full school year	160.7	158,378,766
Oklahoma.....	1907	7-18	Two-thirds school year	148.5	45,466,957
Oregon.....	1945	7-16	Full school year	142.9	31,650,632
Pennsylvania.....	1895	8-17	Full school year	161.9	205,378,541
Rhode Island.....	1883	7-16	Full school year	152.3	13,928,949
South Carolina.....	1915	7-16	80 days	137.9	28,959,341
South Dakota.....	1883	7-16	Full school year	149.6	15,683,290
Tennessee.....	1947	7-16	Full school year	138.9	39,596,342
Texas.....	1915	7-16	100 days	143.9	138,465,080
Utah.....	1890	8-18	100 days	156.2	17,868,353
Vermont.....	1945	7-16	170 days	155.6	6,519,879
Virginia.....	1908	7-16	Full school year	155.4	47,839,806
Washington.....	1871	8-16	Full school year	138.6	59,661,297
West Virginia.....	1897	7-16	Full school year	157.0	40,107,640
Wisconsin.....	1879	7-16	120 days	159.9	69,860,838
Wyoming.....	1876	7-16	Full school year	135.3	7,661,263

*Full-time public schools 1945-46.

Vocational and Special School Enrollment, 1947*

Source: U. S. Office of Education.

Type of school	Agriculture	Trade and industry	Home economics	Distributive education	Total
Evening.....	263,118	116,781	333,156	140,996	854,051
Part-time.....	23,714	386,064	105,403	94,145	609,326
All-day.....	297,701	217,253	530,287	.....	1,045,241
Total.....	584,533	720,098	968,846	235,141	2,508,618

*Provisional figures.

Statistics of State School Systems, 1933 to 1945

Years	Enrollment					High-school graduates		Expense per pupil in average daily attendance	Value of textbooks free to pupils
	Total	Elementary schools		Secondary schools		Boys	Girls		
		Boys	Girls	Boys	Girls				
1933-1934 . . .	26,434,193	10,645,991	10,119,046	2,802,122	2,867,034	396,016	440,909	\$67.48	\$12,715,857
1935-1936 . . .	26,367,098	10,455,192	9,937,369	2,948,765	3,025,772	447,409	484,874	74.30	22,595,179
1937-1938 . . .	25,975,108	10,153,007	9,595,167	3,032,963	3,193,971	481,906	552,252	83.87	24,230,207
1939-1940 . . .	25,433,542	9,681,465	9,150,633	3,257,952	3,350,492	538,273	604,973	88.09	25,614,116
1940-1941 . . .	25,296,138	9,529,587	9,052,638	3,273,606	3,440,307	536,715	615,508	92.38	26,076,002
1941-1942 . . .	24,562,473	9,336,067	8,838,601	3,089,434	3,298,371	535,156	626,043	98.31	27,012,724
1942-1943 . . .	24,155,146	9,237,002	8,796,078	2,891,633	3,230,433	489,115	597,383	104.85	27,090,248
1943-1944 . . .	23,266,616	9,081,270	8,631,826	2,553,356	3,000,164	393,418	559,836	116.99	23,987,277
1944-1945 . . .	23,225,784	9,053,952	8,611,642	2,565,699	2,994,491	—944,536—		125.41	23,954,676
1945-1946 . . .	23,299,941	9,098,013	8,579,731	2,633,117	2,989,080	—974,407—		136.41	27,447,595

Sources: U. S. Office of Education.

Total School Enrollments, 1919 to 1944

Type of school by level	1919-20	1929-30	1933-34	1939-40	1941-42	1943-44
Kindergartens:						
Public	481,266	723,443	601,775	594,647	625,783	697,468
Private	29,683	54,456	37,506	57,341	57,341	57,341
Elementary:						
Public	18,897,661	20,555,150	20,228,014	18,286,906	17,588,723	17,053,473
Private	1,455,878	2,255,430	2,333,191	2,106,030	2,084,653	2,021,618
Total kindergarten and elem'y schools . . .	20,864,488	23,588,479	23,200,486	21,044,924	20,356,500	19,829,900
High Schools:						
Public	2,200,389	4,399,422	5,669,156	6,601,444	6,387,805	5,553,520
Private	213,920	341,158	360,092	457,768	483,195	420,961
Total high schools	2,414,309	4,740,580	6,029,248	7,059,212	6,871,000	5,974,481
Normal schools and teachers colleges	135,435	176,462	136,184	177,045	144,945	74,379
Colleges, univ., and prof. schools	462,445	924,275	919,176	1,317,158	1,259,045	803,138
Total higher education	597,880	1,100,737	1,055,360	1,494,203	1,403,990	877,517
Priv. comm. & bus. schools (day and eve.) . .	335,161	179,756	102,286	634,546	488,112	488,112

Professional Schools, Including Teacher-Training Institutions, 1942 and 1944

Profession	1942				1944*			
	Undergraduate		Graduate		Undergraduate		Graduate	
	Men	Women	Men	Women	Men	Women	Men	Women
Agriculture	26,124	490	1,855	64	4,096	554	887	90
Architecture	2,283	657	86	8	652	764	43	10
Commerce	78,438	22,735	3,148	615	22,431	30,666	1,574	641
Dentistry	8,412	166	110	.....	10,012	147	108	3
Education	54,653	119,975	9,443	10,773	12,286	88,384	5,017	10,531
Engineering	114,554	464	4,301	20	107,451	1,687	3,562	49
Fine Arts	1,976	4,637	15	21	1,345	6,421	33	88
Forestry	2,632	4	96	.....	448	8	36	.....
Home economics	399	22,110	1	417	36	17,558	1	372
Journalism	1,398	1,043	75	37	383	1,426	18	49
Law	19,177	1,236	350	33	5,893	1,285	133	34
Library science	161	1,003	63	147	72	888	16	108
Medicine	22,615	1,443	1,780	182	25,382	1,626	1,180	158
Music	3,907	7,967	300	363	1,166	7,008	150	344
Nursing	104	11,217	.....	190	48	17,860	2	355
Pharmacy	7,548	1,102	129	14	2,921	1,376	75	12
Theology	11,805	891	1,869	82	12,243	805	1,783	81
Veterinary medicine	2,541	29	71	2	2,658	53	60	5
Total †	384,441	212,686	26,220	13,947	290,934	198,309	17,137	13,977

*667 institutions.

†Includes enrollments in professional schools not listed above.

Sources (this page): U. S. Office of Education.

School Attendance, 1940 and 1945

Source: Department of Commerce, Bureau of the Census.

Year and age	Male			Female			Total		
	Popula- tion	Attending school		Popula- tion	Attending school		Popula- tion	Attending school	
		Number	Per- cent		Number	Per- cent		Number	Per- cent
APRIL 1940									
5 years old.....	1,087,811	190,842	17.5	1,054,596	194,318	18.4	2,142,407	385,160	18.0
6 years old.....	1,041,757	710,525	68.2	1,012,628	709,526	70.1	2,054,385	1,420,051	69.1
7 to 9 years old.....	3,289,255	3,096,174	94.1	3,198,575	3,022,852	94.5	6,487,830	6,119,026	94.3
10 to 13 years old.....	4,734,213	4,510,906	95.3	4,605,992	4,404,763	95.6	9,340,205	8,915,669	95.5
14 and 15 years old.....	2,440,453	2,189,880	89.7	2,387,796	2,157,785	90.4	4,828,249	4,347,665	90.0
16 and 17 years old.....	2,462,443	1,679,590	68.2	2,429,727	1,681,616	69.2	4,892,170	3,361,206	68.7
18 and 19 years old.....	2,495,373	769,773	30.8	2,523,461	679,712	26.9	5,018,834	1,449,485	28.9
20 to 24 years old.....	5,692,392	466,895	8.2	5,895,443	293,942	5.0	11,587,835	760,837	6.6
Total.....	23,243,697	13,614,585	58.6	23,108,218	13,144,514	56.9	46,351,915	26,759,099	57.7
OCTOBER 1945									
5 years old.....	1,200,000	320,000	26.7	1,160,000	350,000	30.0	2,360,000	670,000	28.3
6 years old.....	1,180,000	1,100,000	93.2	1,140,000	1,060,000	93.3	2,320,000	2,170,000	93.2
7 to 9 years old.....	3,400,000	3,320,000	97.6	3,280,000	3,240,000	98.8	6,680,000	6,560,000	98.2
10 to 13 years old.....	4,230,000	4,140,000	97.8	4,120,000	4,050,000	98.1	8,360,000	8,180,000	97.9
14 and 15 years old.....	2,440,000	2,230,000	91.5	2,270,000	2,110,000	92.7	4,710,000	4,340,000	92.1
16 and 17 years old.....	2,190,000	1,410,000	64.5	2,270,000	1,480,000	65.2	4,460,000	2,890,000	64.9
18 and 19 years old.....	810,000	180,000	21.6	2,220,000	450,000	20.3	3,030,000	630,000	20.6
20 to 24 years old.....	1,810,000	100,000	5.6	5,970,000	200,000	3.3	7,780,000	300,000	3.8
Total.....	17,260,000	12,790,000	74.1	22,440,000	12,930,000	57.6	39,700,000	25,730,000	64.8

Estimated Public and Private School Enrollment, 1947-48

Type of school	Total	Type of school	Total
Elementary*		Higher education	
Public.....	20,004,000	Universities, colleges, professional schools, includ- ing junior colleges and normal schools.....	2,750,000
Private and parochial.....	2,492,000	Other schools	
Residential schools for exceptional children.....	60,000	Private commercial.....	300,000
Elementary grades in colleges.....	41,000	Nurse training schools (not affiliated with colleges and universities).....	100,000
Federal schools for Indians.....	23,000	Total.....	400,000
Total.....	22,620,000	Grand total.....	32,100,000
Secondary		*These data do not include enrollments in private, trade, vocational, art, music, drama, and Bible schools that are not departments of colleges and universities.	
Public.....	5,730,000		
Private and parochial.....	535,000		
Residential schools for exceptional children.....	10,000		
Secondary schools in colleges.....	50,000		
Federal schools for Indians.....	5,000		
Total.....	6,330,000		

Junior College Enrollment, 1919 to 1944

Source: U. S. Office of Education.

Year	Total		Publicly controlled		Privately controlled	
	Number	Enrollment	Number	Enrollment	Number	Enrollment
1919-20.....	52	8,102	10	2,940	42	5,162
1929-30.....	277	55,616	129	36,501	148	19,115
1935-36.....	415	102,453	187	70,557	228	31,896
1937-38.....	453	121,510	209	82,041	244	39,469
1939-40.....	456	149,854	217	107,553	239	42,301
1941-42.....	461	141,272	231	100,783	230	40,489
1943-44.....	413	84,616	210	56,439	203	28,177

White and Negro Statistics in Selected States, 1946*

Source: U. S. Office of Education.

State	Enrollment		Expense per pupil in A.D.A.†		Instructional staff		Average annual salary of teachers‡	
	White	Negro	White	Negro	White	Negro	White	Negro
Alabama.....	412,771	225,604	\$85.46	\$37.59	13,976	6,221	\$1,451	\$ 884
Arkansas.....	297,370	95,700	74.11	34.93	9,890	2,655	1,163	711
Delaware.....	34,400	7,283	158.04	125.12‡	1,420	259	2,244	1,976
D. C.....	54,030	40,747	190.36	149.42	2,104	1,313	2,637	2,637
Florida.....	271,360	101,817	134.76	61.75	10,856	3,519	1,862	1,278
Georgia.....	435,271	259,111	82.57	31.14	15,922	7,350	1,279	651
Kentucky.....	490,256	36,205	90.05	98.35‡	16,465	1,358	1,289	1,367
Louisiana.....	270,567	165,706	136.12	4,381‡	10,164	4,489	1,797	948
Maryland.....	225,231	63,160	130.40	110.66‡	7,346	1,888	2,297	2,127
Mississippi.....	258,224	258,800	75.19	14.74	8,665	6,245	1,165	427
Missouri.....	574,348	50,887	137.68	133.35‡	21,382	1,637	2,703	1,853
North Carolina.....	562,192	251,307	86.05	70.36	18,458	7,436	1,608	1,587
Oklahoma.....	424,570	36,695	111.30	118.32	15,649	1,528	1,807	1,688
South Carolina.....	247,224	201,020	100.38	39.64	9,316	6,220	1,365	834
Tennessee.....	492,951	102,068	80.30	55.44‡	17,554	3,139	1,330	1,044
Texas.....	1,048,899	197,554	123.14	91.22‡	38,999	6,705	1,695	1,315
Virginia.....	400,282	147,699	104.29	53.15‡	14,305	4,495	1,605	1,475
West Virginia.....	385,816	24,857	100.63	111.47‡	14,125	979	1,571	1,799
Total.....	21,033,721	2,266,220	104.66	57.57	799,812	67,436	1,640	1,139

*All figures are for public elementary and secondary schools. †A.D.A. = average daily attendance. ‡Includes supervisors, principals and teachers. §Estimate based on teachers' salaries.

High-school and College Graduates, 1900 to 1944

(Public and private schools)

Year of graduation	High school			College		
	Men	Women	Total	Men	Women	Total
1900.....	38,075	56,808	94,883	17,220	8,104	25,324
1910.....	63,676	92,753	156,429	22,557	11,621	34,178
1920.....	123,684	187,582	311,266	31,980	16,642	48,622
1930.....	300,376	366,528	666,904	73,615	48,869	122,484
1940.....	578,718	642,757	1,221,475	109,546	76,954	186,500
1942.....	576,717	665,658	1,242,375	103,889	81,457	185,346
1943.....	527,100	635,184	1,162,284	76,182	75,510	151,692
1944.....	423,971	595,262	1,019,233	55,876	69,999	125,875

Public and Private Residential Schools for the Blind, Deaf, Mentally Deficient, and Delinquent, 1922 to 1946

Source: U. S. Office of Education.

Type and year	States reported*	Schools reported	Pupils	Type and year	States reported*	Schools reported	Pupils
Blind:				Deaf (con't.):			
1922.....	39	48	4,634	1940.....	45	79	14,673
1927.....	41	51	5,245	1945-46.....	45	79	12,971
1931.....	41	55	5,530				
1936.....	41	55	5,851	Mentally deficient:			
1940.....	40	50	5,870	1936.....	47	130	21,889†
1945-46.....	41	54	5,150	1940.....	46	104	21,806†
				1945-46.....	46	139	21,460†
Deaf:				Delinquent:			
1922.....	43	75	11,417	1936.....	49	154	31,174
1927.....	44	76	13,928	1940.....	49	142	29,109
1931.....	45	83	14,854	1945-46.....	49	163	22,460†
1936.....	45	79	15,366				

*Includes District of Columbia. †Includes only children reported for school work.

Academic Degree Abbreviations

Source: American Council on Education.

Ae.E.	Aeronautical Engineer	G.L.	Graduate in Law
B.A.	Bachelor of Arts	G.N.	Graduate Nurse
B.Ag.	Bachelor of Agriculture	G.Ph.	Graduate in Pharmacy
B.App.Arts	Bachelor of Applied Arts	HH.D.	Doctor of Humanities
B.Arch.	Bachelor of Architecture	L.H.D.	Doctor of Humane Letters
B.B.A.	Bachelor of Business Administration	Litt.M.	Master of Letters
B.B.S.	Bachelor of Business Science	LL.B.	Bachelor of Laws
B.C.E.	Bachelor of Civil Engineering	LL.D.	Doctor of Laws
B.Ch.E.	Bachelor of Chemical Engineering	LL.M.	Master of Laws
B.D.	Bachelor of Divinity	M.A.	Master of Arts
B.Ed.	Bachelor of Education	M.Aero.E.	Master of Aeronautical Engineering
B.E.E.	Bachelor of Electrical Engineering	M.C.E.	Master of Civil Engineering
B.F.A.	Bachelor of Fine Arts	M.C.S.	Master of Commercial Science
B.J.	Bachelor of Journalism	M.D.	Doctor of Medicine
B.L.	Bachelor of Letters	M.E.	Mechanical Engineer
B.Litt.	Bachelor of Literature	M.Ed.	Master of Education
B.Med.	Bachelor of Medicine	Med.Sc.D.	Doctor of Medical Science
B.Mus.	Bachelor of Music or in Music	M.Eng.	Mining Engineer
B.N.	Bachelor of Nursing	M.F.	Master of Forestry
B.Pharm.	Bachelor of Pharmacy	M.F.A.	Master of Fine Arts
B.Ph.	Bachelor of Philosophy	M.Int.Med.	Master of Internal Medicine
B.S.	Bachelor of Science	M.M.	Master of Music
B.Th.	Bachelor of Theology	M.Mech.Eng.	Master of Mechanical Engineering
C.E.	Civil Engineer	M.Mus.	Master of Music
Ch.E.	Chemical Engineer	M.N.	Master of Nursing
D.C.E.	Doctor of Civil Engineering	M.P.H.	Master of Public Health
D.C.L.	Doctor of Civil Law	M.R.E.	Master of Religious Education
D.C.S.	Doctor of Commercial Science	M.R.P.	Master in Regional Planning
D.D.	Doctor of Divinity	M.S.	Master of Science
D.D.S.	Doctor of Dental Surgery	M.Soc.Wk.	Master of Social Work
D.Ed.	Doctor of Education	M.Surgery	Master in Surgery
D.M.L.	Doctor of Modern Languages	M.Th.	Master of Theology
D.M.S.	Doctor of Medical Science	Phar.D.	Doctor of Pharmacy
D.P.H.	Doctor of Public Health	Ph.B.	Bachelor of Philosophy
D.R.E.	Doctor of Religious Education	Ph.C.	Pharmaceutical Chemist
D.Sc.	Doctor of Science	Ph.D.	Doctor of Philosophy
D.V.M.	Doctor of Veterinary Medicine	Ph.G.	Graduate in Pharmacy
E.E.	Electrical Engineer	Ph.L.	Licentiate in Philosophy
E.M.	Engineer of Mines	Ph.M.	Master of Philosophy
E.Met.	Engineer of Metallurgy	S.Sc.D.	Doctor of Social Science
		S.T.B.	Bachelor of Sacred Theology
		S.T.D.	Doctor of Sacred Theology
		S.T.M.	Master of Sacred Theology

Colors of Academic Degrees

Agriculture	Maize	Library Science	Lemon
Arts and Letters	White	Medicine	Green
Commerce & Accountancy	Drab	Music	Pink
Dentistry	Lilac	Oratory	Silver gray
Economics	Copper	Pharmacy	Olive green
Education	Light blue	Philosophy	Dark blue
Engineering	Orange	Physical Education	Sage green
Fine Arts, Architecture	Brown	Public Health	Salmon pink
Forestry	Russet	Science	Golden yellow
Humanities	Crimson	Theology	Scarlet
Law	Purple	Veterinary Science	Gray

Accredited U. S. Colleges and Universities, Fall Semester, 1948

Only schools accredited by at least one of the seven regional accrediting associations are listed. The date of founding lists the original issue of the charter. The number of faculty and students includes only those on full-time status. Endowment does not include yearly grants given to state institutions for maintenance, etc., nor does it include the living endowment for Catholic schools.

M=Male; F=Female; C=Coeducational; Co=Coordinate

*denotes that figures apply for 1947. †denotes that figures apply for Spring term, 1948. ‡denotes that women are admitted for special courses and graduate work when applied to a male school and that men are admitted in the emergency when applied to a female school.

Institution and location	Found- ed	Chief executive	Fac- ulty	No. of students	Vols. in library	Control	Endowment
Adams State College; Alamosa, Colo.*	1921	Ira Richardson	59	706 C	24,000	State	
Adelphi College; Garden City, N. Y.	1896	P. D. Eddy	150	2,116†C	45,000	Priv.	\$ 650,000
Agnes Scott College; Decatur, Ga.	1889	J. R. McCain	65	550 F	54,400	Priv.	2,550,000
Akron, University of; Ohio*	1870	H. E. Simmons	134	2,983 C	72,648	City	135,412
Alabama, University of; University	1831	J. M. Gallalee	650	8,969 C	300,000	State	6,053,925
Alabama A and M College; Normal	1875	J. F. Drake	53	690 C	14,000	State	
Alabama Coll. for Women; Montevalo	1896	J. T. Caldwell	80	800 F	57,000	State	655,729
Alabama Polytechnic Inst.; Auburn	1872	R. B. Draughon	375	7,614 C	116,927	State	550,991
Ala. State Teachers Coll.; Florence	1854	J. A. Keller	85	1,457 C	50,000	State	
Ala. State Teachers Coll.; Jacksonville	1864	Houston Cole	63	1,208†C	19,643	State	
Ala. State Teachers Coll.; Livingston*	1835	W. W. Hill	32	406 C	24,470	State	
Alabama State Teachers Coll.; Montgomery*	1874	H. C. Trenholm	65	1,275 C	13,407	State	
Ala. State Teachers College; Troy	1887	C. B. Smith	39	800 C	30,000	State	
Albertus Magnus Coll.; New Haven, Conn.	1925	Sister M. Irmina	35	250 F	22,000	Cath.	6,175
Albion College; Albion, Mich.	1835	Wm. W. Whitehouse	61	1,264 C	68,000	Meth.	3,236,000
Albright College; Reading, Pa.*	1856	H. V. Masters	53	779 C	27,506	Evan.	993,497
Alfred University; Alfred, N. Y.	1836	M. E. Drake	76	950 C	66,900	Priv.	1,200,000
Allegheny College; Meadville, Pa.	1815	L. T. Benezet	72	1,000 C	112,000	Priv.	2,100,000
Alma College; Alma, Mich.	1886	D. D. Welch	45	610 C	53,222	Presb.	508,910
Alverno College; Milwaukee, Wis.	1936	Sister Augustine	19	342 F	26,238	Cath.	
American Int'l College; Springfield, Mass.	1885	J. H. Miller	40	1,360†C	14,000	Priv.	829,707
American University; Washington, D.C.	1893	P. F. Douglass	180	1,205 C	115,038	Meth.	7,000,000
Amherst College; Amherst, Mass.	1821	C. W. Cole	107	1,190 M	263,636	Priv.	60,000
Anderson College; Anderson, Ind.	1917	J. A. Morrison	48	582 C	19,829	Ch. of God	2,750,000
Antioch College; Yellow Springs, Ohio	1853	D. M. McGregor	76	1,076†C	73,000	Priv.	
Appalachian State Teachers Coll.; Boone, N. C.*	1903	B. B. Dougherty	51	1,005 C	36,300	State	
Aquinas College; Grand Rapids, Mich.	1923	V. Rev. A. Bukowski	24	405 C	15,500	Cath.	
Arizona, University of; Tucson	1885	J. B. McCormick	300	4,825†C	220,000	State	
Arizona State College; Flagstaff	1899	L. A. Eastburn	55	671†C	32,280	State	
Arizona State College; Tempe	1885	Grady Gammage	138	3,000 C	56,700	State	
Arkansas, University of; Fayetteville	1871	L. W. Jones	225	5,626†C	227,000	State	132,667
Arkansas A and M College; Monticello	1909	W. E. Morgan	35	685 C	17,000	State	
Arkansas State College; State College	1909	W. J. Edens	86	1,086 C	23,228	State	
Arkansas State Teachers Coll.; Conway	1907	N. M. Irby	71	1,366 C	28,975	State	
Asbury College; Wilmore, Ky.	1890	Z. T. Johnson	40	932 C	31,000	Priv.	1,020,000

Ashtand, Ohio	1878	G. L. Clayton	34	525 C	22,300	433,045
Atlanta College; Ashland, Ohio	1878	G. L. Clayton	34	525 C	22,300	433,045
Atlanta University; Atlanta, Ga. ¹	1867	L. N. Holm	30	471+C	86,000	4,987,115
Atlantic Union Coll.; S. Lancaster, Mass.	1882	L. N. Holm	30	384+C	27,000	Advent.
Augustana College; Rock Island, Ill.	1860	C. Bergendoff	62	1,250 C	96,308	Luth.
Augustana Coll.; Sioux Falls, S. Dak.	1860	L. M. Stavig	48	800 C	20,125	Luth.
Aurora College; Aurora, Ill.	1893	T. P. Stephens	35	469 C	32,000	Advent.
Baker University; Baldwin, Kans.	1858	N. P. Horn	36	637+C	60,000	Meth.
Baldwin-Wallace College; Berea, Ohio	1845	A. Riemenschneider	77	1,796 C	52,000	Meth.
Ball State Teachers Coll.; Muncie, Ind.	1918	J. R. Emens	165	2,800 C	102,793	State
Barat Coll. of Sacred Heart; Lake Forest, Ill.*	1919	Mother M. Reilly	30	309 F	20,000	Cath.
Bard College; Annandale-on-Hudson, N. Y.	1860	E. C. Fuller	36	285 C	60,000	Priv.
Bates College; Lewiston, Me.	1864	C. F. Phillips	53	835 C	80,000	Priv.
Baylor University; Waco, Tex.	1845	W. R. White	152	4,587 C	150,000	Bapt.
Beaver College; Jenkintown, Pa.	1853	R. M. Kistler	58	630 F	24,500	Presb.
Belhaven College; Jackson, Miss.	1894	G. T. Gillespie	80	230 F	19,500	Presb.
Beloit College; Beloit, Wis.	1846	Carey Gronels	71	1,050 C	144,000	Priv.
Benedict College; Columbia, S. C.	1870	J. A. Bacots	31	839+C	18,752	Bapt.
Bennett College; Greensboro, N. C.	1873	D. F. Jones	39	463 F	24,750	Meth.
Bennington College; Bennington, Vt.	1932	F. Burkhardt	42	300 F	29,000	Priv.
Berea College; Berea, Ky.	1855	F. S. Hutchins	75	1,200 C	107,000	Priv.
Bessie Tift College; Forsyth, Ga.	1849	W. Fred Gunn	24	225 F	18,000	Bapt.
Bethany College; Bethany, W. Va.	1840	W. H. Cramblet	45	743+C	45,835	Priv.
Bethany College; Lindsborg, Kans.	1881	Emory Lindquist	28	400 C	25,770	Luth.
Bethel College; North Newton, Kans.	1893	Ed. G. Kaufman	34	490+C	27,000	Menon.
Birmingham-Southern Coll.; Birmingham, Ala.	1856	G. R. Stuart	60	1,339+C	60,000	Meth.
Black Hills Teachers Coll.; Spearfish, S. Dak.	1883	R. E. Jonas	30	400 C	20,000	State
Blue Mountain Coll.; Blue Mount, Miss.	1873	L. T. Lowrey	28	270 F	18,310	Bapt.
Bluefield State College; Bluefield, W. Va.	1895	H. L. Dickason	36	659+C	20,000	State
Boston, Teachers Coll. of City of Mass.	1852	W. H. J. Kennedy	25	324 C	30,000	City
Boston College; Chestnut Hill, Mass.	1863	Rev. W. L. Keleher	240	5,200 M†	209,082	Cath.
Boston University; Chestnut Hill, Mass.	1839	D. L. Marsh	800	10,448+C	275,454	Priv.
Bowdoin College; Brunswick, Me.	1794	K. C. M. Sills	85	1,036+M	216,000	Priv.
Bowling Green State Univ.; Bowling Green, O.	1910	F. J. Prout	216	4,500 C	90,000	State
Bradley University; Peoria, Ill.	1897	D. B. Owen	150	3,155 C	70,000	Priv.
Brandeis University; Waltham, Mass. ²	1849	A. L. Sachar	9	135 C	10,000	Priv.
Briar Cliff College; Sioux City, Iowa	1930	Sister J. Marie	34	350 F	20,000	Cath.
Bridgewater College; Bridgewater, Va.	1880	J. L. Baugher	23	505 C	16,000	Breth.
Brigham Young University; Provo, Utah	1875	H. S. McDonald	204	4,803 C	145,000	Mormon
Brooklyn, Polytechnic Inst. of; New York, N. Y.*	1854	H. S. Rodgers	122	1,708 M	39,046	Priv.
Brooklyn College; New York, N. Y.	1930	H. D. Gideonae	460	7,900 C	172,423	City
Brooklyn Coll. of Pharmacy of R. I. U.; N. Y. C.	1877	H. H. Schaefer	16	550 C	6,500	State
Brown University; Providence, R. I.	1764	H. M. Wriston	275	4,551 Co ³	720,000	Priv.
Bryn Mawr College; Bryn Mawr, Pa.	1880	Katherine McBride	84	624+F	197,500	Priv.
Bucknell University; Lewisburg, Pa.	1846	H. L. Spencer	137	2,376 C	110,000	Bapt.
Buffalo, University of; Buffalo, N. Y.	1846	S. P. Capen	280	5,665 C	234,910	Priv.
Butler University; Indianapolis, Ind.	1850	M. O. Ross	250	3,887+C	86,000	Priv.
California, Univ. of; Berkeley ⁴	1868	R. G. Sproul	3,235	41,315 C	2,437,384	State

Accredited U. S. Colleges and Universities, Fall Semester, 1948—(cont.)

Institution and location	Found-	Chief executive	Fac- ulty	No. of students	Vols. in library	Control	Endowment
California Inst. of Technology; Pasadena	1891	L. A. DuBridge	135	1,300 M	69,336	Priv.	21,000,000
Calvin College; Grand Rapids, Mich.	1876	Henry Schultze	52	1,351+C	33,500	Ch. Ref.	196,138
Canisius College; Buffalo, N. Y.	1870	Rev. R. W. Schouten	68	2,180 C	44,511	Cath.	
Capital University; Columbus, Ohio	1850	H. L. Yochum	61	1,075 C	54,100	Luth.	677,791
Carleton College; Northfield, Minn.	1866	L. M. Gould	88	1,125 C	148,192	Priv.	3,950,000
Carnegie Inst. of Tech.; Pittsburgh, Pa.	1900	R. E. Doherty	252	3,646+Co ⁵	65,000	Priv.	24,000,000
Carnoll College; Helena, Mont.	1910	Msgr. E. J. Riley	24	320 M	19,000	Cath.	500,000
Carnoll College; Waukesha, Wis.	1846	N. V. Russell	52	815 C	38,208	Presb.	1,050,000
Carson-Newman Coll.; Jefferson City, Tenn.	1851	I. N. Carr	48	831 C	28,000	Bapt.	700,000
Carthage College; Carthage, Ill.	1870	Erland Nelson	42	700 C	36,000	Luth.	750,000
Case Inst. of Tech.; Cleveland, Ohio	1881	T. K. Glennan	125	1,700 M	40,000	Priv.	10,000,000
Catawba College; Salisbury, N. C.	1851	A. R. Keppel	60	800 C	30,000	Evangel.	650,000
Catholic Univ. of America; Wash., D. C.	1867	Rt. Rev. McCormick	451	4,445 M ⁰	328,264	Cath. & Ref.	4,957,711
Cedar Crest College; Allentown, Pa.	1867	D. H. Moore	38	390 F	26,000	Evangel.	144,000
Centenary College; Shreveport, La.	1825	J. J. Mickle	66	1,706 C	29,640	Meth.	
Central College; Fayette, Mo.	1855	E. P. Puckett	50	800 C	50,000	Meth.	1,024,000
Central College; Pella, Iowa	1853	G. T. Vander Lugt	38	491 C	23,650	Ref.	416,956
Central Mich. Coll. of Ed.; Mt. Pleasant	1892	C. L. Anspach	151	2,205 C	60,600	State	
Central Missouri State Coll.; Warrensburg	1871	G. W. Diemer	92	1,534 C	67,838	State	
Central State College; Edmond, Okla.	1890	R. R. Robinson	60	1,150 C	35,338	State	
Central State Teach. Coll.; Stevens Pt., Wis.	1894	Wm. C. Hansen	57	900 C	40,000	State	
Central Wash. Coll. of Ed.; Ellensburg	1891	R. E. McConnell	84	1,300 C	46,962	State	
Centre College; Danville, Ky.	1819	W. A. Groves	46	625 Co	55,197	Presb.	2,015,433
Charleston, Coll. of; S. C.	1785	G. D. Grice	19	468+C	32,426	City	553,500
Chattanooga, Univ. of; Tenn.	1886	D. A. Lockmiller	110	1,021+C	150,000	Priv.	913,859
Chestnut Hill Coll.; Philadelphia, Pa.	1876	Sister M. Kostka	49	476+F	33,000	Cath.	
Chicago, Univ. of; Ill.	1890	R. M. Hutchins	746	8,473 C	1,600,000	Priv.	72,344,406
Chicago Teach. Coll.; Ill.	1869	R. M. Cook	58	760 C	82,000	City	
Chico State Coll.; Chico, Calif.*	1887	A. J. Hamilton	65	1,000 C	40,000	State	11,092,974
Cincinnati, Univ. of; Ohio	1819	Raymond Walters	500	7,061+C	621,903	City	
Citadel, Mil. Coll. of; Charleston, S. C.	1842	Gen. C. Summerall	131	2,075 M	43,537	State	
Ciuremont Graduate School; Calif.	1925	Frederick Hard	10	325 C	68,000	Priv.	923,757
Clark College; Atlanta, Ga.	1869	J. P. Brawley	37	847 C	15,100	Meth.	907,000
Clark University; Worcester, Mass.	1887	H. B. Jefferson	63	1,050 C	750,000	Priv.	6,099,938
Clarke College; Dubuque, Iowa	1843	Sister M. A. Leone	35	430+F	26,126	Cath.	211,150
Clarkson Coll. of Tech.; Potsdam, N. Y.	1896	R. H. Davis	97	1,700 M	13,000	Priv.	1,701,064
Clemson College; Clemson, S. C.	1889	J. F. Poole	225	3,250 M	101,737	State	281,120
Coe College; Cedar Rapids, Iowa	1851	B. S. Hollinshead	55	750+C	60,000	Priv.	2,250,000
Coker College; Hartsville, S. C.	1908	D. C. Agnew	34	385 F	23,000	Priv.	700,000
Colby College; Waterville, Me.	1813	J. S. Bixler	77	1,044+C	124,000	Priv.	4,200,000
Colgate University; Hamilton, N. Y.	1819	Everett Case	128	1,490 M	156,136	Priv.	5,851,224
Colorado, Univ. of; Boulder	1876	R. L. Stearns	511	8,700 C	620,000	State	755,827
Colorado A & M Coll.; Ft. Collins	1870	L. E. Newson	216	3,173+C	135,000	State	574,853

Colorado College, Colorado Springs	1874	W. H. Gill	75	1,300	C	140,000	Priv.	3,000,000
Colorado School of Mines; Golden	1874	B. H. Parker	101	1,216	M	75,200	State	125,000
Colorado State Coll. of Ed.; Greeley	1890	W. R. Ross	102	1,817	C	117,653	State	
Columbia College; Columbia, S. C.	1854	J. C. Guilds	35	300	F	1,600	Priv.	573,000
Columbia Univ.; New York, N. Y.	1754	D. C. Eisenhower	4,154	27,300	M ¹	1,806,375	Priv.	92,116,313
Concord College; Athens, W. Va.	1895	V. H. Stewart	46	890	C	20,000	State	
Concordia Coll.; Moorehead, Minn.	1891	H. N. Brown	68	1,121	C	33,561	Luth.	570,959
Connecticut, Teach. Coll. of; New Britain	1849	J. D. Welte	116	1,250	C	34,000	State	
Connecticut Coll.; New London	1881	A. N. Jorgensen	517	7,400	C	136,000	State	159,163
Connecticut State Teach. Coll.; Danbury	1911	Rosemary Park	89	850	F	121,974	Priv.	2,257,764
Connecticut State Teach. Coll.; New Haven	1904	Ruth A. Haas	51	310	C	25,000	State	
Connecticut State Teach. Coll.; Willimantic	1893	S. M. Brownell	49	756	C	25,000	State	
Converse Coll.; Spartanburg, S. C.	1889	J. E. Smith	44	185	C	11,000	State	
Cooper Union; New York, N. Y.	1889	E. M. Gwathmey	50	435	F	42,000	Priv.	
Cornell College; Mt. Vernon, Iowa*	1859	R. S. Burdell	61	1,589	C	125,000	Priv.	650,000
Cornell Univ.; Ithaca, N. Y.	1853	E. D. Cole	64	782	C	60,000	Meth.	9,063,900
Creighton Univ.; Omaha, Nebr.	1865	E. E. Day	1,250	10,160	C	1,350,636	Priv. & St.	2,425,728
Culver-Stockton College; Canton, Mo.	1878	W. H. McCabe	281	2,606	C	160,000	Cath.	35,000,000
Dakota Wesleyan Univ.; Mitchell, S. Dak.	1853	W. H. McDonald	36	452	C	30,000	Priv.	2,500,000
Dartmouth College; Hanover, N. H.	1885	S. M. Hilburn	35	308	C	50,000	Meth.	755,000
Davidson Coll.; Davidson Coll., N. C.	1769	J. S. Dickey	330	3,000	M	639,899	Priv.	574,410
Dayton, University of; Ohio*	1837	J. R. Cunningham	57	180	M	50,000	Presb.	24,639,149
Delaware, University of; Newark, Del.	1850	Rev. G. J. Renneker	138	2,303	C	44,825	Cath.	5,275,000
Delaware State College; Dover	1833	W. S. Carlson	180	2,200	C	106,000	State	5,845,465
Delta State Teach. Coll.; Cleveland, Miss.	1692	H. D. Gregg	48	380	C	14,000	State	
Denison University; Granville, Ohio	1925	W. M. Kethley	50	620	C	22,000	State	
Denver, University of; Colo.	1831	K. I. Brown	73	1,359	C	114,000	Bapt.	3,647,000
De Paul University; Chicago, Ill.	1864	J. F. Price	384	8,133	C	200,276	Priv.	2,052,931
De Pauw Univ.; Greencastle, Ind.	1898	V. Rev. J. O'Malley	350	4,689	C	81,500	Cath.	6,377,156
Detroit, University of; Mich.	1837	Cl. E. Wildman	140	2,082	C	107,109	Meth.	1,700,000
Dickinson College; Carlisle, Pa.	1877	Wm. J. Millor	250	6,700	C	140,000	Cath.	2,400,000
Dillard Univ.; New Orleans, La.	1773	W. W. Edel	75	974	C	81,000	Priv.	3,000,000
Doane College; Crete, Nebr.	1930	A. W. Dent	46	561	C	22,000	Priv.	1,500,000
Drake University; Des Moines, Iowa	1872	D. L. Crawford	30	460	C	32,200	Cong.	1,742,374
Drew University; Madison, N. J.	1881	H. G. Harmon	182	3,823	C	115,000	Priv.	5,829,008
Drexel Inst. of Tech.; Philadelphia, Pa.	1867	F. G. Holloway	55	620	C	200,628	Meth.	3,036,843
Drury College; Springfield, Mo.	1891	James Creese	215	3,450	C	95,000	Priv.	1,020,000
Dubuque, University of; Iowa	1873	J. F. Findlay	50	835	C	60,000	Priv.	1,027,250
Duchesne College; Omaha, Nebr.	1852	R. La Porte	41	684	C	30,000	Presb.	49,519,484
Duke Univ.; Durham, N. C.	1917	Mother H. Casey	21	275	F	19,350	Cath.	
Dunbarton Coll. of Holy Cross; Wash., D. C.	1838	R. L. Flowers	640	4,482	C	900,000	Priv.	4,700,000
Duquesne University; Pittsburgh, Pa.	1935	Sister M. Frederick	13	208	F	22,030	Cath.	1,527,712
D'Youville College; Buffalo, N. Y.*	1878	F. P. Smith	150	5,000	C	42,215	Cath.	
Earlham College; Richmond, Ind.	1908	Sister J. Frances	35	449	F	27,000	Cath.	
East Carolina Teach. Coll.; Greenville, N. C.	1847	T. E. Jones	44	796	C	73,000	Friends	
East Central State Coll.; Ada, Okla.	1907	J. D. Messick	87	1,402	C	67,040	State	
	1909	C. F. Spencer	70	1,526	C	30,000	State	

Accredited U. S. Colleges and Universities, Fall Semester, 1948—(con't.)

Institution and location	Found- ed	Chief executive	Fac- ulty	No. of students	Vols. in library	Control	Endowment
East Tennessee State Coll.; Johnson City	1911	C. S. Sherrod	82	1,310†C	36,250	State	
East Texas State Tech. Coll.; Commerce, Tex.	1889	J. G. Gee	125	2,064 C	90,000	State	
Eastern Illinois State Coll.; Charleston	1895	G. Buzzard	138	1,382 C	66,312	State	
Eastern Kentucky State Coll.; Richmond ^a	1906	W. F. O'Donnell	85	1,400 C	75,000	State	
Eastern Montana State Normal Sch.; Billings	1925	A. G. Peterson	27	319 C	14,800	State	
Eastern Nazarene Coll.; Wollaston, Mass.	1918	E. S. Mann	28	472 C	18,000	Naz.	
Eastern New Mexico Coll.; Portales	1934	F. D. Golden	65	650 C	23,238	State	
Eastern Oregon Coll. of Ed.; La Grande	1929	R. J. Maaske	35	600 C	25,690	State	
Eastern Washington Coll. of Ed.; Cheney	1890	W. W. Isle	95	1,155†C	63,000	State	
Elmhurst College; Elmhurst, Ill.	1871	H. W. Dinkmeyer	40	650†C	43,500	Evang.	237,980
Elmira College; Elmira, N. Y.	1855	W. S. A. Pott	42	386 F	58,000	Priv.	592,911
Elon College; Elon Coll., N. C.	1889	L. E. Smith	40	762 C	37,000	Cong.	
Emmanuel College; Boston, Mass.	1919	Sister M. Patricia	48	759 F	28,000	Cath.	
Emmanuel Missionary Coll.; Berrien Spr., Mich.	1874	A. W. Johnson	51	810†C	37,420	Advent.	
Emory and Henry Coll.; Emory, Va.	1836	Rev. F. G. Gibson	26	550 C	24,500	Meth.	675,000
Emory University; Emory Univ., Ga.	1836	G. C. White	280	3,200 M†	312,000	Meth.	18,121,325
Erskine College; Due West, S. C.	1839	R. C. Grier	28	400 C	20,000	Presb.	375,000
Evansville Coll.; Evansville, Ind.	1854	L. B. Hale	81	1,450 C	26,332	Meth.	400,000
Fairmont State Coll.; Fairmont, W. Va.	1865	G. H. Hand	55	1,250 C	32,000	State	
Fenn College; Cleveland, Ohio	1881	J. C. Nichols	140	1,700 C	33,000	Priv.	780,000
Findlay College; Findlay, Ohio	1882	H. C. Fox	21	432 C	24,000	Ch. of God	502,499
Fisk University; Nashville, Tenn.	1865	C. S. Johnson	59	973 C	96,561	Priv.	4,417,288
Fletcher Sch. of Law & Dipl.; Medford, Mass. ^a	1933	R. B. Stewart	11	50 C	40,000	Priv.	1,000,000
Florida, University of; Gainesville	1853	J. H. Miller	792	9,600 C	310,000	State	350,000
Florida A and M Coll.; Tallahassee	1887	W. H. Gray, Jr.	253	1,500 C	18,000	State	1,205,750
Florida Southern Coll.; Lakeland	1885	L. M. Spivey	91	2,150†C	45,162	Meth.	206,000
Florida State Univ.; Tallahassee	1857	D. S. Campbell	340	4,274 C	119,801	State	844,000
Fordham University; New York, N. Y.	1841	Rev. R. I. Gannon	295	7,141 C	228,456	Cath.	
Ft. Hays Kansas State Coll.; Hays	1900	L. D. Wooster	90	1,050 C	50,000	State	
Franklin and Marshall Coll.; Lancaster, Pa.	1787	R. A. Distler	79	1,300 M	111,000	State	1,657,208
Franklin College; Franklin, Ind.	1834	T. H. Kent	28	587 C	41,317	Bapt.	1,203,005
Fresno State Coll.; Fresno, Calif.	1911	Arnold E. Joyal	176	2,925†C	72,134	State	
Furman University; Greenville, S. C.	1826	J. L. Plyler	70	1,400†C	70,000	State	3,200,000
Gen. Beadle State Teach. Coll.; Madison, S. Dak.	1881	V. A. Lowry	25	160 C	27,715	State	
Geneva College; Beaver Falls, Pa.	1848	McL. M. Pearce	53	850 C	40,000	Presb.	800,000
Geo. Peabody Coll. for Teach.; Nashville, Tenn.	1875	H. H. Hill	80	1,320 C	171,000	Priv.	5,228,967
George Pepperrine Coll.; Los Angeles, Calif. ^a	1937	H. M. Tiner	95	1,500 C	26,520	Priv.	895,897
George Washington Univ.; Washington, D. C.	1821	C. H. Marvin	425	8,401 C	165,000	Priv.	2,765,000
George Williams College; Chicago, Ill.	1890	H. C. Coffman	19	375 C	25,000	Priv.	247,522
Georgetown Coll.; Georgetown, Ky.	1829	S. S. Hill	50	750 C	16,000	Bapt.	571,484
Georgetown University; Washington, D. C.	1789	V. Rev. L. C. Gorman	226	4,796 M†	394,142	Cath.	3,500,000
Georgia, University of; Athens	1785	Harmon Caldwell	400	6,500 C	250,000	State	1,175,506
Georgia Inst. of Technology; Atlanta	1885	B. R. Van Leer	361	4,539†M	95,000	State	604,890

Georgia State Womans College; Valdosta	1906	J. R. Thaxton	30	1,350	F	40,000	State
Georgia Teachers Coll.; Collegeboro	1924	Z. S. Henderson	50	608†	C	23,675	State
Georgian Court College; Lakewood, N. J.	1908	Mother M. John	26	234	F	30,000	State
Gettysburg College; Gettysburg, Pa.	1832	H. W. A. Hanson	80	1,248	C	62,000	Luth.
Glenville State Coll.; Greenville, W. Va.	1872	H. B. Heflin	28	570	C	20,000	State
Gonzaga University; Spokane, Wash.	1887	F. E. Coe	85	1,780	C	65,000	Cath.
Good Counsel College; White Plains, N. Y.	1923	Sister M. Dolores	24	384	F	16,100	Cath.
Goshen College; Goshen, Ind.	1903	E. E. Miller	33	609	C	35,325	Menon.
Goucher College; Baltimore, Md.	1885	O. F. Kraushaar	51	750	F	87,324	Priv.
Great Falls, College of; Great Falls, Mont.*	1932	Sister M. Dorothy	27	542	C	20,000	Cath.
Greensboro College; Greensboro, N. C.	1838	L. N. Gobb	29	369	F	20,000	Meth.
Grinnell College; Grinnell, Iowa	1846	S. N. Stevens	90	1,162	C	120,000	Priv.
Grove City Coll.; Grove City, Pa.	1876	W. C. Kettler	60	1,335†	C	43,253	Presb.
Guilford Coll.; Guilford Coll., N. C.	1837	C. A. Milner	40	640	C	29,000	Friends
Gustavus Adolphus Coll.; St. Peter, Minn.	1862	E. M. Carlson	68	1,259	C	30,815	Luth.
Hamilton College; Clinton, N. Y.	1812	R. W. McEwen	52	594	M	215,000	Priv.
Hamline University; St. Paul, Minn.*	1854	C. N. Pace	81	1,186	C	51,830	Meth.
Hampten-Sydney Coll.; Hampden-Sydney, Va.	1776	E. G. Gammon	26	436	M	36,150	Presb.
Hampton Institute; Hampton, Va.	1868	R. P. Bridgman	165	1,185†	C	75,782	Priv.
Hanover College; Hanover, Ind.	1827	A. G. Parker, Jr.	96	640	C	46,000	Presb.
Hardin-Simmons University; Abilene, Tex.	1891	R. N. Richardson	93	2,222	C	39,000	Bapt.
Harris Teachers College; St. Louis, Mo.	1905	C. A. Naylor, Jr.	48	72	C	25,000	State
Harvard University; Cambridge, Mass.	1636	J. B. Conant	2,204	11,704†	M	5,000,000	Priv.
Hastings College; Hastings, Nebr.	1882	W. M. French	44	742	C	36,055	Presb.
Haverford College; Haverford, Pa.	1833	G. F. White	55	561	M	174,500	Friends
Heidelberg College; Tiffin, Ohio	1850	W. T. Wickham	49	825	C	36,000	Evans. & Ref.
Henderson St. Teach. Coll.; Arkadelphia, Ark.	1929	D. D. McBrien	60	991	C	28,000	State
Hendrix College; Conway, Ark.	1884	M. L. Ellis	36	626*	C	47,000	Meth.
Hillsdale College; Hillsdale, Mich.	1844	H. L. Turner	44	625	C	40,000	Bapt.
Hiram College; Hiram, Ohio	1850	P. H. Fall	34	671†	C	49,000	Priv.
Hofstra College; Hempstead, N. Y.	1935	J. C. Adams	86	2,117*	C	26,232	Priv.
Hollins College; Hollins Coll., Va.	1842	Bessie C. Randolph	39	363†	F	44,000	Priv.
Holy Cross, College of; Worcester, Mass.	1843	Rev. J. A. O'Brien	125	1,862	M	167,000	Cath.
Holy Names, College of; Oakland, Calif.	1868	Sister Emmanuella	25	325†	F	30,400	Cath.
Holy Names College; Spokane, Wash.*	1907	Sister M. F. Xavier	24	160	F	14,000	Cath.
Hood College; Frederick, Md.	1893	A. J. Truxal	51	519	F	29,350	Ref.
Hope College; Holland, Mich.	1851	I. J. Lubbers	52	1,156	C	40,000	Meth.
Houghton College; Houghton, N. Y.	1883	S. W. Paine	39	782	C	25,423	Bapt.
Howard College; Birmingham, Ala.	1842	H. G. Davis	75	1,300	C	37,000	Priv.
Howard University; Washington, D. C.	1867	M. W. Johnson	468	7,029	C	250,108	State
Humboldt State College; Arcata, Calif.	1913	A. S. Gist	45	485*	C	20,685	City
Hunter College; New York, N. Y.*	1870	G. N. Shuster	392	6,555	F	159,364	Meth.
Huntingdon College; Montgomery, Ala.	1854	Hubert Searcy	45	897	C	32,000	Presb.
Huron College; Huron, S. Dak.	1883	G. F. McDougall	26	425	C	26,200	Presb.
Idaho, College of; Caldwell	1891	L. A. Williams	35	480	C	25,000	State
Idaho, University of; Moscow	1899	J. E. Buchanan	271	3,414†	C	120,000	State

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Institution and location	Found- ed	Chief executive	Fac- ulty	No. of students	Vols. in library	Control	Endowment
Idaho State College; Pocatello	1901	G. W. McIntosh	117	1,335†C	25,000	State	3,955,419
Illinois, University of Urbana ¹⁰	1867	G. D. Stoddard	1,368	25,307†C	2,003,622	State	2,747,020
Illinois College, Jacksonville	1829	H. G. Hudson	28	552 C	37,299	Presb.	1,319,181
Illinois Inst. of Technology; Chicago	1892	H. T. Heald	200	3,465 C	125,000	Priv.	2,000,000
Illinois State Normal University; Normal, Ill.	1857	R. W. Fairchild	228	2,250 C	124,431	State	
Illinois Wesleyan Univ.; Bloomington*	1850	M. J. Holmes	82	1,281 C	45,000	Meth.	1,506,960
Immaculate College; Immaculata, Pa.	1914	Rt. Rev. V. L. Burns	44	350 F	24,000	Cath.	
Incarinate Heart Coll.; Los Angeles, Calif.*	1916	Mother Eucharis	42	407 F	21,000	Cath.	122,312
Incarinate Word College; San Antonio, Tex.	1881	Sister Columkille	50	679†F	37,298	Cath.	111,000
Indiana Central College; Indianapolis	1902	I. L. Esch	37	425†C	19,700	Breth.	
Indiana State Teachers Coll.; Terre Haute	1865	R. N. Tiley	158	2,286†C	153,392	State	
Indiana University; Bloomington	1820	H. B. Wells	618	14,176†C	750,000	State	3,425,677
Iowa, State University of; Iowa City	1847	V. M. Hancher	640	10,550 C	694,532	State	1,387,140
Iowa State Coll. of A and M Arts; Ames	1858	C. E. Friley	700	8,551†C	375,000	State	1,157,000
Iowa State Teachers College; Cedar Falls	1876	Malcolm Price	253	2,900 C	140,000	State	
Iowa Wesleyan College; Mt. Pleasant	1842	S. B. Niles	54	650 C	33,876	Meth.	700,000
James Millikin Univ.; Decatur, Ill.	1876	J. W. Malone	90	1,370 C	40,000	Presb.	2,000,000
Jamestown College; Jamestown, N. Dak.	1903	H. J. Bell, Jr.	32	441 C	24,000	Presb.	1,310,636
John B. Stetson University; De Land, Fla.	1883	H. O. Edmunds	78	2,053 C	55,000	Bapt.	900,000
John Carroll University; Cleveland, Ohio	1886	V. Rev. F. E. Weifle	65	2,000 M†	47,873	Cath.	4,000,000
Johns Hopkins University; Baltimore, Md.	1876	Isaiah Bowman	275	2,454†M†	760,000	Priv.	2,000,000
Johnson C. Smith Univ.; Charlotte, N. C. ²	1867	Hardy Liston	37	761 C	23,000	Presb.	540,000
Judson College; Marion, Ala.	1838	J. I. Riddle	26	205 F	20,000	Bapt.	
Juilliard School of Music; New York, N. Y.	1920	William Schuman	141	435†C	52,300	Priv.	814,349
Juniaata College; Huntingdon, Pa.	1876	C. N. Ellis	50	716 C	40,333	Breth.	
Kalamazoo College; Mich.	1833	A. B. Stowe	55	7,00†C	393,000	State	1,250,000
Kansas, University of; Lawrence	1865	D. W. Malott	500	9,400 C	176,903	State	2,000,000
Kansas City, University of; Mo.	1929	C. R. Decker	105	2,008†C	148,678	State	557,021
Kans. State Coll. of Agr. and Appl. Sc.; Manhattan	1863	M. S. Eisenhower	596	6,750 C	94,000	State	250,000
Kansas State Teachers College; Emporia	1863	D. L. MacFarlane	112	1,326†C	70,000	State	
Kansas State Teachers College; Pittsburg	1903	R. H. Hughes	135	1,575 C	90,482	State	
Kent State University; Kent, Ohio	1910	G. A. Bowman	264	6,100 C	437,000	State	198,428
Kentucky, University of; Lexington	1865	H. L. Donovan	442	7,548 C	18,127	State	
Kentucky State College; Frankfort	1886	R. B. Atwood	84	654 C	37,521	State	
Kentucky State Teachers College; Morehead	1923	W. J. Baird	56	505 C	119,661	Episc.	2,104,196
Kenyon College; Gambier, Ohio	1824	G. K. Chalmers	58	630 M	36,342	Bapt.	372,000
Keuka College; Keuka Park, N. Y.	1890	Kath. G. Blyley	27	431 F	77,000	Priv.	2,777,618
Knox College; Galesburg, Ill.	1837	K. D. McClelland	68	833 C	20,065	Presb.	4,500,000
Lafayette College; Easton, Pa.	1826	R. C. Hutchison	135	1,975 M	14,260	Meth.	1,000,000
La Grange College; La Grange, Ga.	1831	W. G. Henry, Jr.	30	155†F	36,656	Priv.	845,575
Lake Erie College; Painesville, Ohio	1856	Helen D. Bragdon	25	200 F	59,719	Priv.	1,383,000
Lake Forest College; Lake Forest, Ill.	1857	E. A. Johnson	43	2,000 M	50,000	Cath.	

1922	G. T. Anderson	34	4761 C	21,000	Advent.
La Sierra College; Arlington, Calif.	G. T. Anderson	34	4761 C	21,000	Advent.
Lawrence College; Appleton, Wis.	N. M. Pusey	67	1,034 C	76,648	Priv.
Lebanon Valley College; Annville, Pa.	C. A. Lynch	48	851* C	1,224,972	Breth.
Lehigh University; Bethlehem, Pa.	M. D. Whittaker	227	3,101 M†	275,000	Priv.
Le Moyne College; Memphis, Tenn.	H. F. Price	23	408† C	20,000	Miss.
Lenoir Rhyme College; Hickory, N. C.	P. E. Monroe	44	801 C	29,374	Luth.
Lewis and Clark College; Portland, Oreg.	M. S. Odell	70	1,100 C	25,000	Presb.
Limestone College; Gaffney, S. C.	R. C. Granberry	36	395 F†	24,680	Priv.
Lincoln Memorial Univ.; Harrogate, Tenn.	R. L. Kincaid	29	516 C	30,000	Priv.
Lincoln University; Jefferson City, Mo.	S. D. Scruggs	82	904† C	34,408	State
Lincoln University; Lincoln Univ., Pa.	H. M. Bond	38	530 M	41,000	Priv. & St.
Lindenwood College; St. Charles, Mo.	F. L. McCluer	49	461† F	31,145	Presb.
Linfield College; McMinnville, Oreg.	H. L. Dillin	52	910 C	33,000	Bapt.
Livingstone College; Salisbury, N. C.	W. J. Trent	31	350 C	23,400	AME Zion
Loras College; Dubuque, Iowa	S. D. Luby	74	1,390† M†	104,874	Cath.
Loretto Heights Coll.; Loreto, Colo	Sister F. Marie	49	400 F	21,000	Cath.
Louisiana College; Pineville, La.	Edgar Godbold	45	765† C	20,850	Bapt.
Louisiana Polytechnic Inst.; Ruston	C. Cottingham	179	2,658 C	39,878	State
La. State Univ. & A & M Coll.; Baton Rouge	C. W. Stoke	631	11,129* C	435,478	State
Louisville, University of; Ky.	H. W. Taylor	254	7,245 C	140,690	City
Loyola College; Baltimore, Md.	Rev. F. X. Talbot	93	965† M†	37,600	Cath.
Loyola University; Chicago, Ill.*†	Rev. J. T. Hussey	693	4,300 C	282,273	Cath.
Loyola University; Los Angeles, Calif.	E. J. Whelan	85	1,723† M	42,000	Cath.
Loyola University; New Orleans, La.	Rev. T. J. Shields	102	1,937 M†	116,000	Cath.
Luther College; Decorah, Iowa	J. W. Yvisaker	50	860 C	66,900	Luth.
Lynchburg College; Lynchburg, Va.	R. B. Montgomery	38	698 C	25,250	Dis. of Ch.
Macalester College; St. Paul, Minn.	C. J. Turck	111	1,560† C	48,055	Presb.
MacMurray Coll. for Women; Jacksonville, Ill.	C. P. McClelland	62	675 F	48,436	Meth.
McPherson College; McPherson, Kans.	W. W. Peters	27	384† C	15,000	Breth.
Madison College; Harrisonburg, Va.	S. P. Duke	88	1,303 F†	48,283	State
Maine, University of; Orono	A. A. Hauck	278	4,737 C	220,733	State
Manchester Coll.; North Manchester, Ind.	V. F. Schwalin	53	821* C	35,000	Breth.
Manhattan College; New York, N. Y.	Brother B. Thomas	112	2,700 M	89,774	Cath.
Manhattanville Coll. of Sac. Heart, N. Y. C.	Mothers E. O'Byrne	66	469 F	76,000	Cath.
Marietta College; Marietta, Ohio	W. B. Irvine	65	1,171† C	128,000	Cong.
Marquette University; Milwaukee, Wis.*	S. Rev. P. A. Brooks	572	7,514 C	160,000	Cath.
Marshall College; Huntington, W. Va.	S. H. Smith	157	2,707 C	53,107	State
Mary Baldwin College; Staunton, Va.	F. B. Lewis	40	350 F	40,000	Priv.
Mary Hardin-Baylor Coll.; Belton, Tex.	G. G. Singleton	47	531 F	32,500	Bapt.
Mary Manse College; Toledo, Ohio	Sister M. Catherine	42	175 F	22,000	Cath.
Marygrove College; Detroit, Mich.	Sister M. Honora	78	815 F	51,398	Cath.
Maryland, Univ. of; Baltimore and College Pk.	H. C. Byrd	1,426	13,500 C	210,000	State
Maryland State Teachers College; Salisbury	J. D. Blackwell	18	300 C	20,000	State
Maryland State Teachers College; Towson	E. T. Hawkins	27	700 C	37,000	State
Marylhurst College; Marylhurst, Oreg.	Sister R. Augusta	27	230 F	22,000	Cath.
Marymount College; Salina, Kans.*	Mother Chrysostom	34	258 F	21,925	Cath.
Marymount College; Tarrytown, N. Y.	Mother M. Therese	54	528† F	20,021	Cath.
					1,000,000

Accredited U. S. Colleges and Universities, Fall Semester, 1948—(cont.)

Institution and location	Found-	Chief executive	Fac- ulty	No. of students	Vols. in library	Control	Endowment
Maryville College; Maryville, Tenn.	1819	R. W. Lloyd	55	884	51,796	Presb.	1,961,696
Marywood College; Scranton, Pa.	1915	Sister M. Sylvia	48	551	37,000	Cath.	75,000
Massachusetts, University of; Amherst	1863	K. A. Van Meter	210	2,502	146,060	State	165,733
Massachusetts Inst. of Technology; Cambridge	1861	R. T. Compton	387	5,662	410,000	Priv.	47,487,000
Massachusetts State Teach. Coll.; Bridgewater*	1840	J. J. Kelly	42	537	23,627	State	15,000
Massachusetts State Teach. Coll.; Fitchburg	1894	W. J. Sanders	44	500	25,000	State	
Massachusetts State Teach. Coll.; Framingham*	1839	M. F. O'Connor	35	469	20,000	State	
Mass. State Teach. Coll.; N. Adams	1894	G. C. Bowman	21	200	18,000	State	
Mass. State Teach. Coll.; Worcester	1871	E. A. Sullivan	18	300	18,000	State	
Memphis State College; Tenn.*	1912	J. M. Smith	83	1,908	36,000	State	
Mercer University; Macon, Ga.	1833	Spright Dowell	70	1,189†C	95,000	Bapt.	2,700,000
Mercyhurst College; Erie, Pa.	1926	Mother Preston	33	295	18,500	Cath.	1,500,000
Meredith College; Raleigh, N. C.	1891	Carlyle Campbell	45	550	31,534	Bapt.	600,191
Miami, University of; Coral Gables, Fla.	1926	B. F. Ashe	367	7,496	114,632	Priv.	300,000
Miami University; Oxford, Ohio	1809	E. H. Hahne	286	5,132	210,232	State	
Michigan, University of; Ann Arbor	1817	A. G. Ruthven	1,500	20,500	1,300,000	State	18,000,000
Michigan Coll. of Mining and Tech.; Houghton	1885	G. C. Dillman	155	2,275	50,000	State	
Michigan State College; East Lansing	1855	J. A. Hannah	1,200	5,000	220,196	State	3,117,000
Michigan State Normal Coll.; Ypsilanti	1849	E. B. Elliott	224	2,340†C	127,000	State	70,000
Middle Tennessee State Coll.; Murfreesboro	1911	Q. M. Smith	50	997†C	35,000	State	
Middlebury College; Middlebury, Vt.	1800	S. S. Stratton	72	1,212	113,490	Priv.	4,800,000
Midland College; Fremont, Nebr.	1887	W. P. Hieronymus	30	396†C	28,317	Luth.	225,925
Mills College; Oakland, Calif.	1852	Lynn White, Jr.	60	750	105,329	Priv.	2,384,803
Millsaps College; Jackson, Miss.	1892	M. L. Smith	40	853	40,000	Meth.	1,250,000
Milwaukee-Downer Coll.; Milwaukee, Wis.	1851	Lucia R. Briggs	42	363†F	50,699	Priv.	2,399,809
Miner Teachers College; Washington, D. C.	1851	E. A. Clark	49	570†C	40,806	D. C.	31,071,477
Minnesota, University of; Minneapolis & Duluth	1851	J. L. Morrill	2,825	29,043	1,501,889	State	
Minnesota State Teachers Coll.; Bemidji	1919	C. R. Sattgast	56	563†C	31,000	State	
Minnesota State Teachers Coll.; Mankato	1867	C. L. Crawford	72	954†C	30,800	State	
Minnesota State Teachers Coll.; Moorhead	1887	O. W. Snarr	62	568†C	30,000	State	
Minnesota State Teachers Coll.; St. Cloud	1869	J. W. Headley	93	1,540	51,927	State	
Minnesota State Teachers Coll.; Winona	1858	Nels Minné	46	600	25,000	State	
Misericordia, College; Dallas, Pa.	1923	Sister M. Teresa	45	440	23,500	Cath.	1,100,000
Mississippi, University of; University, Miss.	1848	J. D. Williams	195	3,067	129,381	State	22,750
Mississippi College; Clinton	1826	D. M. Nelson	50	959†C	36,650	Bapt.	750,000
Mississippi Southern Coll.; Hattiesburg	1910	R. C. Cook	95	1,776	32,623	State	
Mississippi State Coll.; State Coll., Miss.	1878	F. T. Mitchell	199	3,470	82,034	State	
Mississippi State Coll. for Women; Columbus	1884	B. L. Parkinson	80	1,160	74,000	State	
Missouri, University of; Columbia and Rolla	1839	F. A. Middlebush	750	13,329	590,000	State	
Missouri Valley College; Marshall	1889	J. F. Doering	34	555†C	32,000	Presb.	2,265,579
Monmouth College; Monmouth, Ill.	1853	J. H. Grier	66	949	53,000	Presb.	606,000
Montana School of Mines; Butte	1893	F. A. Thomson	29	377	20,787	State	2,013,000
Montana State College; Bozeman	1893	F. R. Renne	185	3,165	76,110	State	500,000
							1,934,661

Montana State Normal College; Dillon	1897	Rush Jordan	18	175 C	18	26,500	State
Montana State University; Missoula	1893	J. A. McCain	174	3,397 C	174	264,442	State
Moravian College; Bethlehem, Pa.	1807	R. S. Haupt	30	410 M	30	41,000	Morav.
Morehouse College; Atlanta, Ga.	1867	B. E. Mays	40	789 M	40	93,000	Priv.
Morgan State Coll.; Baltimore, Md.	1867	M. D. Jenkins	76	1,294 C	76	39,155	State
Morningside Coll.; Sioux City, Iowa	1894	E. A. Roadman	52	1,030 C	52	57,775	Meth.
Morris Brown College; Atlanta, Ga.	1881	W. A. Fountain, Jr.	64	824 C	64	9,812	AME Zion
Mount Holyoke College; S. Hadley, Mass.	1836	R. G. Ham	150	1,130 F	150	211,400	Priv.
Mount Mary College; Milwaukee, Wis.	1915	E. A. Fitzpatrick	47	625 F	47	37,375	Cath.
Mount Mercy College; Pittsburgh, Pa.	1929	Mother McConnell	42	432 Ft	42	30,456	Cath.
Mt. St. Joseph-on-Ohio, Coll. of; Ohio*	1854	Mother M. Zoe	43	415 F	43	24,000	Cath.
Mount Saint Mary College; Hooksett, N. H.	1934	Sister M. Mauritia	23	235 F	23	17,704	Cath.
Mount Saint Mary's Coll.; Emmitsburg, Md.	1808	Rt. Rev. J. Sheridan	35	656 M	35	45,000	Cath.
Mount St. Mary's Coll.; Los Angeles, Calif.	1925	Sister de Lourdes	37	427 F	37	20,000	Cath.
Mount St. Scholastica Coll.; Atchison, Kans.	1863	Mother L. Dooley	40	410 F	40	25,000	Cath.
Mt. St. Vincent, Coll. of; St. Vincent, N. Y.	1847	Sister C. Marie	57	640 F	57	30,168	Cath.
Mount Union College; Alliance, Ohio	1846	C. B. Ketcham	47	1,008 C	47	74,000	Meth.
Muhlenberg College; Allentown, Pa.	1848	Levering Tyson	96	1,340 M	96	73,983	Luth.
Mundelein College; Chicago, Ill.	1930	Sister M. Josephine	70	900 F	70	29,308	Cath.
Murray State College; Murray, Ky.	1922	R. H. Woods	99	1,560*C	99	40,000	State
Muskingum College; New Concord, Ohio	1837	Edna D. Montgomery	70	944 C	70	35,000	Presb.
National Coll. of Ed.; Evanston, Ill.	1886	Edna D. Baker	48	369 F	48	27,649	Priv.
Nazareth College; Louisville, Ky.	1920	Sister Coady	56	870 F	56	25,000	Cath.
Nazareth College; Nazareth, Mich.	1897	Sister M. Kevin	19	235 F	19	28,450	Cath.
Nazareth College; Rochester, N. Y.	1924	Rev. Mother Miriam	41	450 F	41	21,608	Cath.
Nebraska, University of; Lincoln	1869	R. G. Gustavson	503	10,150 C	503	525,000	State
Nebraska State Teachers College; Chadron	1911	W. G. Brooks	50	400 C	50	22,381	State
Nebraska State Teachers College; Kearney	1905	H. L. Cushing	51	751 F	51	36,359	State
Nebraska State Teachers College; Peru	1867	W. L. Nicholas	42	39 C	42	56,100	State
Nebraska State Teachers College; Wayne	1910	V. P. Morey	60	747 C	60	35,000	State
Nebraska Wesleyan Univ.; Univ. Place Station	1887	J. L. Knight	60	844 F	60	37,164	Meth.
Nevada, University of; Reno	1874	A. O. Moseley	108	1,772 C	108	76,800	State
New Hampshire, University of; Durham	1866	J. S. Adams	214	3,581 C	214	150,861	State
New Hampshire State Teach. Coll.; Keene	1909	L. P. Young	32	427 F	32	26,499	State
New Hampshire State Teach. Coll.; Plymouth	1870	H. R. Jones	33	256 C	33	16,500	State
New Jersey State Teach. Coll.; Glassboro	1923	E. F. Bunce	35	500 C	35	32,000	State
New Jersey State Teach. Coll.; Jersey City	1929	F. A. Irwin	48	700 C	48	24,395	State
New Jersey State Teach. Coll.; Montclair	1908	H. A. Sprague	97	1,484 C	97	52,316	State
New Jersey State Teach. Coll.; Newark	1912	J. B. Dougall	39	660 C	39	38,000	State
New Jersey State Teach. Coll.; Paterson	1855	C. S. Wightman	38	600 C	38	20,000	State
New Jersey State Teach. Coll.; Trenton	1855	R. L. West	73	931 C	73	55,720	State
New Mexico, University of; Albuquerque	1889	T. L. Popejoy	196	4,889 C	196	157,362	State
New Mexico Coll. of A and M Arts; State Coll.	1889	J. R. Nichols	150	1,650 C	150	59,605	State
New Mexico Highlands University; Las Vegas	1893	Edward Eyring	46	1,000 C	46	35,000	State
New Mexico School of Mines; Socorro	1889	E. J. Workman	29	280 C	29	11,000	State
New Mexico State Teachers Coll.; Silver City	1893	H. W. James	37	382 C	37	27,000	State
New Rochelle, College of; New Rochelle, N. Y.	1904	Rt. Rev. F. Walsh	59	875 F	59	60,402	Cath.

Accredited U. S. Colleges and Universities, Fall Semester, 1948—(con't.)

Institution and location	Found- ed	Chief executive	Fac- ulty	No. of students	Vols. in library	Control	Endowment
New York, Coll. of City of; N. Y. C.	1847	H. N. Wright	917	11,200 C ¹³	343,565	City	534,632
New York State Coll. for Teachers; Albany	1844	M. G. Nelson	123	1,500 C	42,842	State	
New York State Coll. of Forestry; Syracuse	1911	J. S. Illick	69	890 M	16,562	State	
New York State Teachers College; Brockport	1867	D. M. Tower	83	965 C	26,000	State	
New York State Teachers College; Buffalo	1871	H. W. Rockwell	135	1,659* C	37,172	State	
New York State Teachers College; Cortland	1863	D. V. Smith	71	1,300 C	26,630	State	
New York State Teachers College; Fredonia	1866	L. R. Gregory	70	750 C	22,000	State	
New York State Teachers College; Geneseo	1867	H. G. Espy	57	550 C	35,000	State	
New York State Teachers College; New Paltz	1886	W. J. Haggerty	73	725 C	17,445	State	
New York State Teachers College; Oneonta	1889	C. H. Hunt	53	476 C	34,223	State	
New York State Teachers College; Oswego	1861	H. M. Rice	102	1,300 C	33,000	State	
New York State Teachers College; Plattsburgh	1889	C. C. Ward	60	700 C	25,000	State	
New York State Teachers College; Potsdam	1869	F. W. Crumb	58	600 C	20,170	State	
New York University; New York, N. Y.	1831	H. W. Chase	1,291	22,177* C	790,968	Priv.	11,577,400
Newark College of Engineering; N. J.*	1881	A. R. Cullimore	129	1,444 C	19,642	City	96,316
Newberry College; Newberry, S. C.	1856	J. C. Kinard	31	541 C	25,000	Luth.	330,000
Niagara University; Niagara Univ.	1856	V. Rev. F. L. Meade	86	1,650 M†	56,000	Cath.	
North Carolina, University of; Chapel Hill	1789	R. B. House	535	7,670* C	514,797	State	3,921,811
N. C. Woman's Coll. of Univ. of; Greensboro	1891	W. C. Jackson	183	1,964† F	128,978	State	
North Carolina College; Durham	1910	Alfonso Elder	58	1,000 C	50,831	State	
N. C. State Coll. of Agr. and Engr.; Raleigh	1889	J. W. Harrelson	441	5,200 C	84,000	State	4,075,357
North Central College; Naperville, Ill.	1861	C. H. Geiger	46	867 C	33,279	Breth.	
North Dakota, University of; Grand Forks	1883	J. C. West	155	2,707* C	105,000	State	1,207,103
North Dakota Agricultural Coll.; Fargo	1890	F. S. Hultz	160	2,379 C	70,000	State	1,700,000
N. Dak. State Nor. and Ind. Coll.; Ellendale	1889	J. C. McMillan	23	216† C	20,000	State	
North Dakota State Teachers Coll.; Dickinson	1917	C. E. Scott	29	375 C	18,089	State	
North Dakota State Teachers Coll.; Mayville	1889	C. C. Lura	25	197† C	20,457	State	
North Dakota State Teachers Coll.; Minot	1913	C. C. Swain	62	823 C	31,285	State	
North Dakota State Teachers Coll.; Valley City	1890	R. L. Lokken	45	397† C	38,000	State	
North Texas State Teachers Coll.; Denton	1890	W. J. McConnell	275	4,430† C	183,184	State	
Northeast Mo. State Teach. Coll.; Kirksville	1867	W. H. Royle	65	1,054 C	100,000	State	
Northeastern State College; Tahlequah, Okla.	1846	John Vaughan	60	1,037 C	42,535	State	
Northeastern University; Boston, Mass.	1898	G. S. Ell	155	5,782 C	40,167	Priv.	1,210,000
Northern Idaho Coll. of Ed.; Lewiston	1893	G. W. Todd	42	450 C	25,000	State	
Northern Illinois State Teach. Coll.; De Kalb	1895	K. L. Adams	114	1,600 C	70,512	State	
Northern Michigan Coll. of Ed.; Marquette	1899	H. A. Tape	86	932† C	42,100	State	
Northern State Teachers Coll.; Aberdeen, S. Dak.	1901	N. E. Steele	43	683 C	30,000	State	
Northwest Missouri State Teach. Coll.; Maryville	1905	J. W. Jones	55	901 C	34,620	State	
Northwest Nazarene Coll.; Nampa, Idaho	1913	L. T. Corlett	42	690 C	14,000	Naz.	
Northwestern State College; Alva, Okla.	1897	S. C. Percetull	39	969† C	27,354	State	
Northwestern State Coll.; Natchitoches, La.	1884	J. C. Gibson	146	1,800 C	53,927	State	
Northwestern Univ.; Evanston and Chicago, Ill.	1851	F. B. Snyder	835	10,765 C	975,000	Priv.	65,000,000
Norwich University; Northfield, Vt.	1819	H. L. Dodge	45	600 M	43,000	Priv.	1,000,000

Notre Dame, University of; Notre Dame, Ind.	1843	Rev. J. Cavanaugh	283	4,770 M†	232,890	Cath.	1,192,231
Notre Dame College; S. Euclid, Ohio	1922	Mother M. Agnes ..	33	310†F	40,000	Cath.	
Notre Dame College; Staten Island, N. Y.	1933	Mother St. Egbert ..	18	305 F	11,939	Cath.	
Oberlin College; Oberlin, Ohio	1833	W. E. Stevenson ..	169	2,100 C	472,031	Priv.	23,668,918
Occidental College; Los Angeles, Calif.	1887	G. Coons	63	1,283 C	86,754	Priv.	1,499,690
Ohio State University; Columbus*	1870	H. L. Bevis	1,430	23,882 C	745,410	State	2,302,881
Ohio University; Athens	1804	J. C. Baker	284	6,200 C	174,136	State	98,505
Ohio Wesleyan University; Delaware	1842	A. S. Flemming ..	125	2,183†C	180,000	Meth.	5,241,991
Oklahoma, A and M College; Stillwater	1890	G. L. Cross	453	12,946†C	285,000	State	4,322,999
Oklahoma College for Women; Chickasha	1890	H. G. Bennett ..	585	10,291 C	217,200	State	
Omaha, Municipal University of; Nebr.*	1908	Dan Procter	56	950 F	35,845	State	
Oregon, University of; Eugene and Portland	1876	Rowland Haynes ..	71	1,991 C	80,000	City	141,404
Oregon State College; Monmouth	1856	H. K. Newburn ..	339	6,884 C	490,000	State	1,378,840
Oregon State College; Corvallis	1856	H. M. Gunn	35	510 C	35,000	State	
Ottawa University; Ottawa, Kans.	1868	A. L. Strand	598	7,474 C	232,000	State	
Otterbein College; Westerville, Ohio	1865	A. B. Martin	23	536†C	20,000	Bapt.	453,172
Ouachita College; Arkadelphia, Ark.	1847	J. G. Howard	60	880 C	36,000	Breth.	1,300,000
Our Lady of the Elms, Coll. of; Chicago, Mass.	1886	J. R. Grant	42	920 C	26,000	Bapt.	500,000
Our Lady of the Lake Coll.; San Antonio, Tex.	1928	Rev. T. O'Leary ..	23	300 F	15,000	Cath.	
Pacific, Coll. of; Stockton, Calif.	1896	J. L. McMahon ..	55	452 F†	48,087	Cath.	465,865
Pacific Lutheran Coll.; Parkland, Wash.	1851	R. E. Burns	87	1,201†C	45,553	Meth.	684,389
Pacific Union Coll.; Angwin, Calif.	1894	S. C. Eastvold	42	848 C	35,000	Luth.	70,238
Pacific University; Forest Grove, Oreg.	1882	P. W. Christian ..	62	817 C	37,538	Priv.	368,741
Paine College; Augusta, Ga.	1849	W. C. Giersbach ..	40	933†C	35,122	Meth.	37,196
Park College; Parkville, Missouri	1875	E. C. Peters	20	328 C	22,050	Presb.	2,000,000
Parsons College; Fairfield, Iowa	1875	J. L. Zwingle	49	520 C	43,586	Presb.	525,384
Pasadena College; Calif.	1912	T. E. Shearer	35	473 C	29,000	Naz.	
Pennsylvania, University of; Philadelphia ¹⁴	1740	W. T. Purkiser ..	25	686 C	25,000		
Pennsylvania Coll. for Women; Pittsburgh	1869	G. W. McClelland ..	1,215	9,000 C	1,132,465	Priv.	31,000,000
Pennsylvania State Coll.; State College ¹⁵	1855	P. R. Anderson ..	42	500 F	32,462	Priv.	1,076,536
Pennsylvania State Teach. Coll.; Bloomsburg	1839	James Milholland ..	1,060	12,000 C	294,407	State	517,000
Pennsylvania State Teach. Coll.; California	1852	H. A. Andruss	45	850 C	32,100	State	
Pennsylvania State Teach. Coll.; Cheyney	1837	R. M. Steele	52	1,050 C	28,000	State	
Pennsylvania State Teach. Coll.; Clarion	1887	L. P. Hill	27	375 C	17,000	State	
Pennsylvania St. Teach. Coll.; E. Stroudsburg	1893	G. Chandler	40	726 C	24,000	State	
Pennsylvania State Teach. Coll.; Edinboro	1861	J. F. Noonan	50	917 C	21,000	State	
Pennsylvania State Teach. Coll.; Indiana	1875	L. H. Van Houten ..	41	418†C	25,000	State	
Pennsylvania State Teach. Coll.; Kutztown	1866	W. E. Pratt	100	1,450 C	30,000	State	
Pennsylvania State Teach. Coll.; Lock Haven	1877	Q. A. W. Rohrbach ..	51	843 C	33,217	State	
Pennsylvania State Teach. Coll.; Mansfield	1854	R. T. Parsons	55	710 C	28,000	State	
Pennsylvania State Teach. Coll.; Millersville	1854	J. G. Morgan	70	822†C	34,000	State	
Pennsylvania State Teach. Coll.; Shippensburg	1871	D. L. Biemesderfer ..	62	826†C	30,899	State	
Pennsylvania State Teach. Coll.; Slippery Rock	1889	H. L. Kriner	54	728 C	32,555	State	
Pennsylvania State Teach. Coll.; West Chester ¹⁶	1871	D. W. Houk	65	683†C	23,053	State	
Phillips University; Enid, Okla.	1906	C. S. Swope	90	1,739 C	42,311	State	
		E. S. Briggs	67	1,366†C	46,000	Dis. of Ch.	932,000

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Institution and location	Found- ed	Chief executive	Fac- ulty	No. of students	Vols. in library	Control	Endowment
Pittsburgh, University of; Pa.	1787	R. H. Fitzgerald	1,076	12,700 C	521,500	Priv. & St.	3,943,836
Pomona College; Claremont, Calif.	1887	E. W. Lyon	93	1,100 C	116,000	Priv.	4,743,458
Portland, University of; Oreg.	1901	V. Rev. T. J. Mehling	97	2,050 Co	50,000	Cath.	25,000
Prairie View A and M Coll.; Prairie View, Tex.	1876	E. B. Evans	107	1,557†C	28,407	State	43,051,775
Princeton University; Princeton, N. J.	1746	H. W. Dodds	483	4,100 M	1,200,000	Priv.	895,811
Principia College; Elmhurst, Ill.	1998	F. E. Morgan	38	451 C	38,000	Priv.	5,000,000
Providence College; Providence, R. I.	1919	V. Rev. R. J. Slavin	90	1,900 M	29,383	Cath.	1,500,000
Puget Sound College of Tacoma, Wash.	1888	R. F. Thompson	71	1,840 C	53,000	Meth.	530,000
Purdue University; Lafayette, Ind.	1869	F. L. Howde	827	14,674 C	255,305	State	1,520,000
Queens College; Charlotte, N. C.	1857	H. B. Blakely	45	485†F	24,000	Presb.	8,177,029
Queens College; New York City	1937	Margaret Kiely	203	3,000 C	71,000	City	1,048,127
Radcliffe College; Cambridge, Mass.	1879	W. K. Jordan	(10)	1,324 F	(10)	Priv.	1,300,000
Randolph-Macon College; Ashland, Va.	1830	J. E. Moreland	31	550 M	41,144	Meth.	3,000,000
Randolph-Macon Woman's Coll.; Lynchburg, Va.	1893	T. H. Jack	74	699 F	67,000	Meth.	1,590,412
Redlands, University of; Redlands, Calif.	1909	G. H. Armacost	82	1,237†C	78,050	Bapt.	11,100,000
Reed College; Portland, Oreg.	1911	E. B. MacNaughton	52	710 C	87,270	Priv.	30,000,000
Regis College; Weston, Mass.	1927	Sister St. Ignatius	54	630 F	31,184	Cath.	3,195,284
Rensselaer Polytechnic Inst.; Troy, N. Y.	1824	L. W. Houston	285	3,985 C	43,870	Priv.	1,088,514
Rhode Island Coll. of Ed.; Providence	1854	L. A. Whipple	60	444 C	26,154	State	700,000
Rhode Island State College; Kingston	1892	C. R. Woodward	195	2,472 C	83,701	State	57,753,638
Rice Institute; Houston, Tex.*	1912	W. V. Houston	131	1,570 C	200,000	Priv.	1,000,000
Richmond, University of; Va.	1832	G. M. Modlin	85	2,000 Co ¹⁷	115,000	Bapt.	500,000
Ripon College; Ripon, Wis.	1851	C. G. Kuebler	60	651 C	41,829	Priv.	3,195,284
Roanoke College; Salem, Va.	1842	C. J. Smith	40	612†C	28,000	Luth.	1,088,514
Rochester, University of; N. Y.*	1850	Alan Valentine	360	3,931 C	464,485	Priv.	700,000
Rockford College; Rockford, Ill.	1847	Mary A. Cheek	36	400 F	36,000	Priv.	57,753,638
Rockhurst College; Kansas City, Mo.	1910	T. M. Knapp	40	750 M	20,000	Cath.	1,000,000
Rocky Mountain College; Billings, Mont.	1883	W. D. Copeland	24	300 C	30,000	Priv.	500,000
Rollins College; Winter Park, Fla.*	1885	Hamilton Holt	64	598 C	80,000	Priv.	933,344
Roosevelt College; Chicago, Ill.	1945	E. J. Sparling	313	6,000 C	40,000	Priv.	20,000
Rosary College; River Forest, Ill.	1848	Sister M. Peter	75	739†F	58,450	Cath.	100,000
Rose Polytechnic Inst.; Terre Haute, Ind.	1874	Carl Wischmeyer	40	600 M	23,000	Priv.	2,300,000
Rosemont College; Rosemont, Pa.	1921	Mother M. Boniface	44	308†F	38,219	Cath.	1,153,288
Russell Sage College; Troy, N. Y.	1916	L. A. Froman	70	600 F	40,000	Priv.	6,250,000
Rutgers University; New Brunswick, N. J.	1766	R. C. Clothier	850	8,850 Co ¹⁸	522,007	Pr. & State	600,000
St. Ambrose College; Davenport, Iowa	1882	Rt. Rev. A. J. Burke	60	1,200 M	25,000	Cath.	
St. Anselm's College; Manchester, N. H.	1889	Rt. Rev. B. C. Dolan	37	650 M	13,200	Cath.	
St. Augustine's College; Raleigh, N. C.	1867	H. L. Trigg	25	420 C	30,000	Episc.	
St. Benedict, Coll. of; St. Joseph, Minn.	1913	Mother Rosamond	27	275 F	27,381	Cath.	
St. Benedict's College; Atchison, Kans.	1858	Rt. Rev. C. McDonald	44	500 M	100,000	Cath.	
St. Bernardine of Siena Coll.; Loudonville, N. Y.	1937	Rev. M. Kennedy	81	2,537 M†	18,150	Cath.	2,000,000
St. Bonaventure Coll.; St. Bonaventure, N. Y.	1859	Rev. T. Plassmann	80	1,370†M	90,000	Cath.	

St. Edward's Seminary; Kenilworth, Wash.	1931	V. Rev. J. McCormick	13	64 M	32,000	Cath.
St. Elizabeth, Coll. of; Convent Station, N. J.	1999	Sister M. Byrne	52	690 F	16,000	Cath.
St. Francis, College of; Joliet, Ill.	1920	Sister M. Aniceta	38	432†F	33,000	Cath.
St. Francis College; Loretto, Pa.	1947	V. Rev. A. M. Veigle	30	850 C	19,000	Cath.
St. Francis Xavier Coll. for Women; Chicago, Ill.	1912	Sister M. Huberta	45	326†F	54,100	Cath.
St. John College; Cleveland, Ohio	1928	Rt. Rev. R. B. Navin	20	202 F	25,000	Cath.
St. John's University; Brooklyn, N. Y.	1970	V. Rev. J. A. Flynn	157	4,211 C	77,000	Cath.
St. Joseph College; W. Hartford, Conn.	1932	Sister M. Rosa	32	475 F	20,558	Cath.
St. Joseph's College; Emmitsburg, Md.*	1809	V. Rev. F. J. Dodd	32	213 F	16,012	Cath.
St. Joseph's College; Philadelphia, Pa.	1851	V. Rev. J. J. Long	60	1,720 M	23,000	Cath.
St. Joseph's Coll. for Women; Brooklyn, N. Y.	1916	Rt. Rev. W. T. Dillon	55	550 F	28,264	Cath.
St. Lawrence University; Canton, N. Y.	1856	E. G. Bewkes	85	1,300 C	88,000	Priv.
St. Louis University; Mo.	1818	P. J. Holloran	373	10,015 C	439,741	Cath.
St. Martin's College; Olympia, Wash.	1895	Rt. Rev. R. Heider	38	285†M	25,000	Cath.
St. Mary College; Xavier, Kans.	1923	A. M. Murphy	37	320 F	42,000	Cath.
St. Mary of the Springs, Coll. of; Columbus, Ohio	1925	Sister M. Angelita	28	240 F	30,000	Cath.
St. Mary-of-the-Wasatch, Coll. of; Salt Lake City	1926	Sister M. Benedictus	16	75†F	12,500	Cath.
St. Mary-of-the-Woods College; Ind.	1846	Mother M. Bernard	48	418†F	73,625	Cath.
St. Mary's College, Notre Dame; Holy Cross, Ind.	1844	Sister M. Madeleva	45	495 F	36,072	Cath.
St. Mary's College; St. Mary's College, Calif.	1863	Brother Austin	54	970 M	38,000	Cath.
St. Mary's College; Winona, Minn.*	1912	Brother Joel	35	492 M	25,000	Cath.
St. Michael's College; Winoski Park, Vt.	1903	V. Rev. D. P. Lyons	62	1,000 M†	45,000	Cath.
St. Norbert College; West De Pere, Wis.	1898	Rt. Rev. H. Pennings	41	752 M	30,000	Cath.
St. Olaf College; Northfield, Minn.	1874	C. M. Granskou	100	1,750 C	70,000	Luth.
St. Patrick's Seminary; Menlo Park, Calif.*	1898	T. C. Mulligan	13	81 M	33,000	Cath.
St. Paul Seminary; St. Paul, Minn.	1894	R. G. Bandas	18	230 M	35,000	Cath.
St. Peter's College; Jersey City, N. J.	1872	Rev. V. J. Hart	60	1,100 M	22,000	Cath.
St. Rose, College of; Albany, N. Y.	1920	M. Rev. E. F. Gibbons	56	541†F	18,615	Cath.
St. Scholastica, College of; Duluth, Minn.	1893	Mother Athanasius	43	480 F	38,000	Cath.
St. Teresa, College of; Kansas City, Mo.	1867	Sister M. Jennings	30	175 F	20,025	Cath.
St. Teresa, Coll. of; Winona, Minn.	1910	Sister R. Dady	63	587 F	35,000	Cath.
St. Thomas, College of; St. Paul, Minn.	1885	V. Rev. V. J. Flynn	87	2,000 M	39,888	Cath.
St. Vincent College; Latrobe, Pa.	1846	Rt. Rev. A. Koch	45	850 M	60,000	Cath.
Salem College; Winston-Salem, N. C.	1776	H. E. Rondthaler	32	370 F	35,000	Priv.
Sam Houston St. Teach. Coll.; Huntsville, Tex.	1879	Harmon Lowman	110	2,141 C	83,410	State
San Diego State College; Calif.	1897	W. R. Hepner	190	4,000 C	100,000	State
San Francisco, University of; Calif.	1855	Rev. W. J. Dunne	51	1,800 M	52,000	Cath.
San Francisco Coll. for Women; Calif.	1930	Mother Melia	45	377 F	100,000	Cath.
San Francisco State College; Calif.	1899	J. P. Leonard	162	3,000 C	60,000	State
San Jose State College; Calif.	1862	T. W. MacQuarrie	305	5,742 C	105,000	State
San Rafael, Dominican Coll. of; Calif.	1891	Sister M. Patrick	40	319 F	40,000	Cath.
Santa Clara, University of; Calif.	1851	Rev. W. C. Gianera	73	1,284 M	65,000	Cath.
Sarah Lawrence College; Bronxville, N. Y.	1926	Harold Taylor	55	353†F†	51,750	Priv.
Scarritt College; Nashville, Tenn.	1892	H. C. Stuntz	19	152†C	7,500	Meth.
Scranton, University of; Pa.*	1838	J. E. Gallery	93	1,895 M	23,000	Cath.
Scripps College; Claremont, Calif.	1926	Frederick Hard	25	246 F	34,730	Priv.
Seattle Pacific College; Wash.	1891	C. H. Watson	36	675†C	21,000	Meth.

337,148
500,000
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386,000

300,000
727,514

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32,000
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29,700
1,622,694
3,898,236
500,000

16,000
500,000

Accredited U. S. Colleges and Universities, Fall Semester, 1948—(con't.)

Institution and location	Found- ed	Chief executive	Fac- ulty	No. of students	Vols. in library	Control	Endowment
Seattle University; Wash.	1898	A. A. Lemieux	30	2,325†C	34,976	Cath.	712,000
Seneca, Colleges of the; Geneva, N. Y. ¹⁹	1822	A. W. Brown	75	1,251 Co	90,390	Episc.	205,108
Seton Hall College; South Orange, N. J.	1856	Rt. Rv. J. F. Kelley	109	5,801†C	36,800	Cath.	500,000
Seton Hill College; Greensburg, Pa.	1918	Rev. W. G. Ryan	52	531†F†	31,600	Cath.	340,000
Shaw University; Raleigh, N. C.	1865	R. P. Daniel	46	875 C	16,000	Bapt.	594,000
Shepherd State Coll.; Shepherdstown, W. Va.	1871	O. S. Ikenberry	30	510 C	20,000	State	3,647,147
Shorter College; Rome, Ga.	1873	C. W. Burks	31	222†F	25,000	Bapt.	1,474,278
Siena Heights College; Adrian, Mich.	1919	Mother M. Gerald	28	366†F	26,705	Cath.	875,470
Simmons College; Boston, Mass.	1899	Bancroft Beatley	150	1,350 F	99,521	Priv.	6,907,243
Simpson College; Indianola, Iowa	1860	E. E. Voigt	45	776†C	34,530	Meth.	2,306,403
Skidmore College; Saratoga Springs, N. Y.	1911	H. T. Moore	88	1,176†F†	62,789	Priv.	3,647,147
Smith College; Northampton, Mass.	1871	Herbert Davis	295	2,225 F	335,429	Priv.	1,474,278
South, University of the; Sewanee, Tenn.	1857	Alexander Guerry	47	628 M†	58,000	Episc.	875,470
South Carolina, University of; Columbia*	1801	N. M. Smith	257	4,614 C	100,000	State	6,907,243
South Carolina St. A and M Coll.; Orangeburg	1886	M. F. Whitaker	83	1,971†C	27,683	State	2,306,403
South Dakota, University of; Vermillion*	1882	I. D. Weeks	130	1,779 C	123,000	State	200,000
S. Dak. School of Mines and Tech.; Rapid City	1885	W. E. Wilson	42	578†C	2,100	State	
S. Dak. State Coll. of A and M Arts; Brookings	1881	F. H. Leinbach	200	1,969†C	86,000	State	
Southeast Missouri State Coll.; Cape Girardeau	1873	W. W. Parker	60	1,450 C	90,000	State	
Southeastern Louisiana Coll.; Hammond	1909	G. J. Tinsley	99	1,231 C	34,844	State	
Southeastern State Coll.; Durant, Okla.	1925	T. T. Montgomery	71	1,073 C	39,223	State	
Southern California, University of; Los Angeles	1879	F. D. Fagg, Jr.	1,452	16,308†C	410,000	Priv.	1,600,000
Southern Idaho Coll. of Ed.; Albion	1893	R. H. Snyder	28	285†C	11,147	State	
Southern Illinois University; Carbondale	1874	C. F. Lay	37	3,000 C	87,777	State	
Southern Methodist University; Dallas, Tex.	1911	Umphey Lee	237	6,686†C	230,000	Meth.	4,461,310
Southern Oregon Coll. of Ed.; Ashland	1926	E. N. Stevenson	34	602 C	20,500	State	
Southern St. Teach. Coll.; Springfield, S. Dak.	1897	J. H. Kramer	23	128 C	31,266	State	
Southern Univ. A and M Coll.; Baton Rouge, La.	1883	F. G. Clark	118	1,796†C	20,000	State	157,492
Southwest Missouri State Coll.; Springfield	1906	Roy Ellis	106	2,000 C	70,000	State	
Southwest Texas State Teach. Coll.; San Marcos	1899	J. G. Flowers	95	206 C	59,220	State	
Southwestern at Memphis; Tenn.	1848	C. E. Diehl	66	784 C	61,017	Presb.	2,492,323
Southwestern College; Winfield, Kans.	1885	M. P. Culver	38	550 C	24,988	Meth.	590,516
Southwestern Inst. of Tech.; Weatherford, Okla.	1901	R. H. Burton	53	717 C	34,368	State	
Southwestern Louisiana Inst.; Lafayette	1898	J. L. Fletcher	200	1,691†C	74,893	State	
Southwestern University; Georgetown, Tex.	1840	J. N. R. Score	60	3,500 C	89,500	Meth.	1,278,175
Spelman College; Atlanta, Ga.*	1881	Florence M. Read	31	376 F	82,000	Priv.	3,260,300
Spring Hill College; Spring Hill, Ala.*	1830	Rev. W. P. Donnelly	35	759 M	52,689	Cath.	242,359
Springfield College; Mass.	1885	P. M. Limbert	491	7,735†C	1,045,700	Priv.	37,297,730
Stanford University; Stanford, Calif.	1891	A. C. Eurich	115	1,424 M†	34,950	Priv.	
Stevens Inst. of Technology; Hoboken, N. J.	1870	H. N. Davis	81	1,244 C	52,000	State	
Step. F. Austin St. Teach. Coll.; Nacogdoches, Tex.*	1923	P. L. Boynton	85	908 C	31,105	State	
Stout Institute; Menomonie, Wis.	1893	V. C. Fryklund	95	350 C	16,000	State	

Sul Ross State Teach. Coll.; Alpine, Tex.	1920	R. M. Hawkins	48	782 C	32,000	State
Superior State College; Superior, Wis.	1893	J. D. Hill	60	817 C	29,436	State
Susquehanna University; Selinsgrove, Pa.	1858	G. M. Smith	34	550 C	27,000	Luth.
Swarthmore College; Swarthmore, Pa.	1864	J. W. Nason	107	975 C	171,428	Priv.
Sweet Briar College; Sweet Briar, Va.	1901	Martha B. Lucas	52	450 F	68,773	Priv.
Syracuse University; Syracuse, N. Y.	1870	W. P. Tolley	1,200	18,456 C	396,419	Priv.
Talladega College; Talladega, Ala.	1867	A. D. Beittel	35	364†C	40,000	Cong.
Tarkio College; Tarkio, Mo.	1883	M. E. Collins	24	454†C	18,660	Presb.
Taylor University; Upland, Ind.	1846	C. W. Meredith	30	500 C	23,386	Priv.
Temple University; Philadelphia, Pa.	1884	R. L. Johnson	667	17,212 C	311,693	Priv.
Tennessee, University of; Knoxville	1794	C. E. Brehm	524	9,400 C	261,453	State
Tenn. Agri. and Industrial State Coll.; Nashville	1912	W. S. Davis	155	2,027†C	30,000	State
Tennessee Polytechnic Inst.; Cookeville	1915	Everett Derryberry	85	1,700 C	31,544	State
Texas, A and M College of; College Station	1871	F. C. Bolton	523	7,800 M	130,000	State
Texas, University of; Austin	1881	T. E. Painter	1,082	17,343 C	863,620	State
Texas Christian University; Fort Worth	1873	M. E. Sadler	198	4,600 C	100,000	Dis. of Ch.
Texas Coll. of Arts and Industries; Kingsville	1925	E. N. Jones	90	1,967†C	38,847	State
Texas College of Mines and Metallurgy; El Paso	1914	E. McRae Thomas	95	1,834 C	43,653	State
Texas State Coll. for Women; Denton	1901	L. H. Hubbard	178	2,279 F	103,000	State
Texas Technological College; Lubbock	1925	D. M. Wiggins	253	6,114 C	135,000	State
Thiel College; Greenville, Pa.	1870	W. F. Zimmerman	38	575 C	20,000	Luth.
Tiiltoson College; Austin, Tex.	1877	W. H. Jones	36	635†C	22,000	Cong.
Toledo, University of; Ohio	1872	R. W. White	190	5,903 C	135,000	City
Transylvania College; Lexington, Ky.	1780	R. F. McLain	30	499 C	44,809	Dis. of Ch.
Trinity College; Hartford, Conn.	1823	G. K. Funston	76	875 M	198,000	Priv.
Trinity College; Washington, D. C.	1897	Sister Dorothea	61	488 F	51,000	Cath.
Tufts College; Medford, Mass. ²⁰	1852	Leonard Carmichael	760	3,547 Co	521,337	Priv.
Tulane University; New Orleans, La.	1834	R. C. Harris	449	6,490†C	506,588	Priv.
Tulsa, University of; Okla.	1894	C. I. Pontius	150	3,120†C	98,273	Priv.
Tusculum College; Greeneville, Tenn.	1794	G. K. Davies	27	410 C	24,000	Presb.
Tuskegee Institute; Tuskegee Inst., Ala.	1881	F. D. Patterson	223	2,648 C	75,000	Priv.
Union College; Barbourville, Ky.	1879	C. Boatman	27	481†C	18,000	Meth.
Union College; Lincoln, Nebr.	1891	R. W. Woods	64	849†C	42,654	Advent.
Union College; Schenectady, N. Y.	1795	Carter Davidson	117	1,500 M	133,000	Priv.
U. S. Coast Guard Academy; New London, Conn.	1876	Adm. W. N. Derby	50	421 M	30,500	Govt.
U. S. Military Academy; West Point, N. Y.	1802	Gen. M. D. Taylor	265	2,480 M	124,000	Govt.
U. S. Naval Academy; Annapolis, Md.	1845	Adm. J. L. Holloway	385	3,320 M	110,000	Govt.
Upsala College; East Orange, N. J.	1893	E. B. Lawson	55	1,587†C	30,000	Luth.
Ursinus College; Collegeville, Pa.	1869	N. E. McClure	58	1,000 C	37,000	Evang. & Ref.
Ursuline College for Women; Cleveland, Ohio	1871	Mother M. Ahearn	31	252†F	20,000	Cath.
Utah, University of; Salt Lake City	1850	A. R. Olpin	450	8,900 C	200,000	State
Utah State Agricultural Coll.; Logan	1888	F. S. Harris	211	4,500 C	122,000	State
Valparaiso University; Valparaiso, Ind.	1859	O. P. Kretzmann	110	2,000 C	96,000	Luth.
Vanderbilt University; Nashville, Tenn.	1872	Harvie Branscomb	360	3,456 C	489,089	Priv.
Vassar College; Poughkeepsie, N. Y.	1861	Sarah G. Blanding	195	1,381†F	254,408	Priv.
Vermont, Univ. of and State Agr. Coll.; Burlington	1791	J. S. Millis	220	3,000 C	200,000	St. & Priv.
Villa Maria College; Erie, Pa.	1925	Mother M. Aurelia	25	300 F	16,000	Cath.

Accredited U. S. Colleges and Universities, Fall Semester, 1948—(con't.)

Institution and location	Found- ed	Chief executive	Fac- ulty	No. of students	Vols. in library	Control	Endowment
Villanova College; Villanova, Pa.	1842	Rev. F. N. McGuire	120	2,500 M	82,415	Cath.	4,040,101
Virginia, University of; Charlottesville	1819	C. W. Darden, Jr.	250	5,003† MF	484,826	State	13,500,000
Virginia Military Institute; Lexington	1839	Gen. R. J. Marshall	67	793 M	81,923	State	712,160
Virginia Polytechnic Inst.; Blacksburg	1872	W. S. Newman	234	4,176† C	123,009	State	349,312
Virginia State College; Petersburg	1832	L. H. Foster	135	1,862 C	40,506	State	173,000
Virginia State Teachers Coll.; Farmville	1884	D. S. Lancaster	49	124† F†	48,728	State	
Virginia Union University; Richmond	1899	J. M. Ellison	46	900 C	20,000	Priv.	826,624
Wabash College; Crawfordsville, Ind.	1832	F. H. Sparks	42	557† M	96,069	Priv.	2,737,408
Wagner Mem. Luth. Coll.; Staten Island, N. Y.	1883	W. C. Langsam	79	946 C	38,555	Luth.	423,555
Wake Forest College; Wake Forest, N. C.	1834	T. D. Kitchen	124	2,050 C	101,496	Bapt.	3,256,823
Walla Walla College; College Place, Wash.	1892	G. W. Bowers	48	1,178† C	27,000	Advent.	
Washburn Municipal University; Topeka, Kans.	1865	B. S. Stoffer	81	1,906 C	66,500	City	1,423,229
Washington, State Coll. of; Pullman	1892	Wilson Compton	705	6,532† C	600,000	State	8,612,811
Washington, University of; Seattle	1861	R. B. Allen	650	16,000 C	610,994	State	
Washington and Jefferson Coll.; Washington, Pa.	1780	J. H. Case, Jr.	84	1,171 M	72,080	Priv.	1,899,238
Washington and Lee Univ.; Lexington, Va.	1782	F. P. Gaines	70	1,270 M	155,013	Priv.	4,689,342
Washington College; Chestertown, Md.	1706	G. W. Mead	32	490 C	35,500	Priv.	
Washington Missionary Coll.; Wash., D. C.	1904	W. H. Shepard	46	650† C	36,000	Advent.	
Washington University; St. Louis, Mo.	1853	A. H. Compton	504	6,275† C	731,873	Priv.	25,723,483
Wayne University; Detroit, Mich.	1868	D. D. Henry	462	16,714† C	319,338	State	
Webster College; Webster Groves, Mo.	1915	G. F. Donovan	60	703 F	27,341	Cath.	
Wellesley College; Wellesley, Mass.	1870	Mildred Horton	216	1,706* F	248,000	Priv.	14,611,227
Wells College; Aurora, N. Y.	1868	R. L. Greene	43	325† F	103,658	Priv.	1,686,700
Wesleyan College; Macon, Ga.	1836	Silas Johnson	96	537 F	34,136	Meth.	1,109,949
Wesleyan University; Middletown, Conn.	1831	V. L. Butterfield	90	895 M	346,147	Priv.	9,152,648
West Liberty State Coll.; W. Liberty, W. Va.	1837	P. N. Elbin	30	537† C	20,000	State	
West Texas State Coll.; Canyon	1910	J. P. Cornette	70	1,789† C	39,000	State	
West Virginia State Coll.; Institute, W. Va.	1891	J. W. Davis	58	1,805 C	33,242	State	
West Virginia University; Morgantown	1867	Irvin Stewart	486	6,590* C	250,000	State	125,300
West Virginia Wesleyan Coll.; Buckhannon	1890	W. J. Scarborough	37	927† C	31,000	Meth.	
Western Carolina Teach. Coll.; Cullowhee, N. C.	1839	W. E. Bird	52	525 C	25,000	State	
Western College for Women; Oxford, Ohio	1853	P. E. Henderson	53	540 F	45,486	Priv.	878,281
Western Illinois State Coll.; Macomb	1899	F. A. Beu	110	1,327 C	56,117	State	
Western Kentucky State Coll.; Bowling Green	1906	L. S. Garrett	95	1,867† C	78,000	State	
Western Maryland College; Westminster	1868	P. S. Ensor	55	815 C	47,156	Meth.	
Western Michigan Coll. of Ed.; Kalamazoo	1903	P. V. Sangren	275	3,786 C	75,000	State	891,900
Western Reserve University; Cleveland, Ohio	1826	P. G. Leutner	639	6,143† Co	600,000	Priv.	17,500,000
Western State College; Gunnison, Colo.	1901	W. P. Mickelson	42	779† C	43,151	State	
Western Washington Coll. of Ed.; Bellingham	1899	W. W. Haggard	72	1,350 C	70,000	State	
Westminster College; Fulton, Mo.	1851	W. W. Hall, Jr.	36	600 M	33,000	Presb.	800,000
Westminster Coll.; New Wilmington, Pa.	1852	John Orr	67	1,122† C	40,000	Presb.	900,000

Wheaton College; Norton, Mass.	1834	A. H. Menely	65	490 F	63,000	Priv.	1,253,320
Wheaton College; Wheaton, Ill.	1860	V. R. Edman	110	1,500 C	91,000	Priv.	780,483
Wheelock College; Boston, Mass.	1889	Winifred E. Bain	21	3501 F	11,500	Priv.	
Whitman College; Walla Walla, Wash.	1859	W. S. Anderson	47	818 C	80,986	Priv.	1,483,004
Whittier College; Whittier, Calif.	1901	W. C. Jones	52	1,076 C	60,000	Friends	750,000
Whitworth College; Spokane, Wash.	1890	F. F. Warren	44	800 C	19,200	Presb.	37,487
Wichita, University of; Kans.	1895	W. M. Jardine	127	3,032 C	78,000	City	94,228
Wiley College; Marshall, Tex.	1882	J. S. Scott	30	570 C	21,000	Meth.	600,000
Willamette University; Salem, Ore.	1842	G. H. Smith	65	1,112† C	42,000	Meth.	1,878,053
William and Mary, Coll. of; Williamsburg, Va.	1693	J. E. Pomfret	123	1,900 C	207,038	State	1,782,210
William Jewell College; Liberty, Mo.	1849	W. P. Binns	40	821 C	59,981	Bapt.	2,276,968
Williams College; Williamstown, Mass.	1793	J. P. Baxter III	132	1,140 M	197,048	Priv.	13,176,781
Wilmington College; Wilmington, Ohio	1870	S. D. Marble	45	575 C	22,637	Friends	600,000
Wilson College; Chambersburg, Pa.	1869	P. S. Havens	53	475 F	58,000	Presb.	1,013,510
Wilson Teachers Coll.; Washington, D. C.	1873	W. E. Hager	46	475 C	27,500	State	
Winthrop College; Rock Hill, S. C.	1886	H. R. Sims	129	1,587† F	70,469	State	5,128,140
Wisconsin, University of; Madison	1848	E. B. Fred	1,955	22,225* C	640,000	State	
Wisconsin State Teachers Coll.; Eau Claire	1916	W. R. Davies	60	650 C	26,862	State	
Wisconsin State Teachers Coll.; La Crosse	1909	R. S. Mitchell	71	765 C	38,437	State	
Wisconsin State Teachers Coll.; Milwaukee	1880	J. M. Klotsche	113	1,650 C	65,298	State	
Wisconsin State Teachers Coll.; Oshkosh	1871	F. R. Polk	58	399† C	37,000	State	
Wisconsin State Teachers Coll.; Platteville	1866	C. O. Newlin	52	435 C	30,000	State	
Wisconsin State Teachers Coll.; River Falls	1874	E. H. Kleinpell	53	779 C	30,000	State	
Wisconsin State Teachers Coll.; Whitewater	1863	R. C. Williams	65	790 C	32,376	State	
Wittenberg College; Springfield, Ohio	1845	R. E. Tulloss	80	1,462 C	77,190	Luth.	2,488,310
Wofford College; Spartanburg, S. C.	1854	W. K. Greene	42	664 M†	42,000	Meth.	882,000
Woodstock College; Woodstock, Md.	1869	Rev. F. Wheeler	28	164 M	100,000	Cath.	1,000,000
Wooster, College of; Wooster, Ohio	1866	H. F. Lowry	82	1,290 C	107,676	Presb.	3,710,723
Worcester Polytechnic Inst.; Mass.	1865	W. T. Cluervius	92	900† M	35,000	Priv.	5,000,000
Wyoming, University of; Laramie	1887	G. D. Humphrey	246	3,381 C	134,000	State	4,362,574
Xavier University; Cincinnati, Ohio	1831	Rev. C. J. Steiner	88	1,902† M†	89,922	Cath.	
Xavier University; New Orleans, La.	1925	Mother M. Agatha	79	1,001 C	52,640	Cath.	
Yale University; New Haven, Conn.	1701	Charles Seymour	660	8,686 M†	3,770,813	Priv.	124,673,459
Yankton College; Yankton, S. Dak.	1881	J. C. Graham	35	433 C	48,951	Cong.	702,000
Youngstown College; Youngstown, Ohio	1908	H. W. Jones	148	3,400 C	40,832	Priv.	

¹Includes graduate students only. For undergraduate information, see Clark College: Morehouse College and Spelman College. ²Reorganized on March 13, 1947; the first entering class started on Sept. 1948. ³Pembroke College is the constituent school for women. ⁴Other campuses at Los Angeles, San Francisco, Davis, Santa Barbara, Riverside, La Jolla and Mt. Hamilton. ⁵Margaret Morrison Carnegie College is the constituent school for women. ⁶Catholic School of Social Service is coeducational. Catholic Sisters College is the constituent school for women. ⁷Columbia College is the school for men; Barnard College is the school for women. ⁸Teachers College and New York School of Social Work are also parts of the Columbia University system. ⁹Other campuses at Hartford, New Haven, Fort Sumner (New London) and Waterbury. ¹⁰Operated in conjunction by Tufts and Harvard Universities. ¹¹Other branches at Chicago and Gainesburg. ¹²West Baden College, Indiana.

Is the constituent school for men. ¹³The school is legally coeducational, but practically all male. ¹⁴The Liberal Arts College is, however, restricted to men. ¹⁵The Schools of Arts and Sciences, Engineering and Commerce are male. ¹⁶Other campuses located at Altona, Du Bois, Hazelton and Pottsville. ¹⁷The faculty is the same that teaches in Harvard University; the library at Harvard is used. ¹⁸Richmond College is the constituent school for men. Westhampton College is for women and the Williams Law School is coeducational. ¹⁹The constituent schools are New Jersey College for Women at New Brunswick and the Newark Colleges (coeducational). ²⁰Include Hobart College (men) and William Smith College (women). ²¹Jackson College is the constituent school for women. ²²The constituent schools are Adelbert College (for men), Flora Stone Mather College (for women) and the Cleveland College (coeducational).

Approved United States Medical Schools

Source: American Medical Association.

Name of school by state	Location	Chief executive	1949 premedical requirements by years	No. of students 1947-48	1948 graduates to Jan. 30
Medical College of Alabama.....	Birmingham, Alabama.....	Roy R. Kracke, M.D., Dean.....	3	132	1
University of Arkansas School of Medicine.....	Little Rock, Arkansas.....	Jos. T. Roberts, M.D., Dean.....	3	274	55
University of California Medical School.....	San Francisco ² , California.....	Francis S. Smyth, M.D., Dean.....	3	283	68
College of Medical Evangelists ³	Loma Linda, California.....	Harold Shryock, M.D., Dean.....	3	319	87
	Los Angeles, California.....	W. F. Norwood, Ph.D., Dean.....			
University of Southern California School of Medicine ³	Los Angeles, California.....	Burrell O. Raulston, M.D., Dean.....	3	251	58
Stanford University School of Medicine ³	San Francisco ⁹ , California.....	Loren R. Chandler, M.D., Dean.....	3	242	57
University of Colorado School of Medicine.....	Denver, Colorado.....	Ward Darley, M.D., Dean.....	90 sem. hrs	233	52
Yale University School of Medicine.....	New Haven, Connecticut.....	C. N. Hugh Long, M.D., Dean.....	3	222	55
Georgetown University School of Medicine.....	Washington, D. C.....	Rev. Paul A. McNally, S.J., Ph.D., Dean.....	degree	369	75
George Washington University School of Medicine.....	Washington, D. C.....	Walter A. Bloedorn, M.D., Dean.....	3	315	80
Howard University College of Medicine.....	Washington, D. C.....	Joseph L. Johnson, M.D., Dean.....	2	274	64
Emory University School of Medicine.....	Emory University, Georgia.....	R. Hugh Wood, M.D., Dean.....	3	210	48
University of Georgia School of Medicine.....	Augusta, Georgia.....	G. Lombard Kelly, M.D., Dean.....	3	290	66
Sitrick School of Medicine of Loyola University.....	Chicago, Illinois.....	James J. Smith, M.D., Dean.....	90 sem. hrs.	277	67
Northwestern University Medical School ³	Chicago, Illinois.....	J. Roscoe Miller, M.D., Dean.....	85 sem. hrs.	520	143
University of Chicago, The School of Medicine.....	Chicago, Illinois.....	F. J. Mullin, Ph.D., Dean.....	3	232	51
University of Illinois College of Medicine.....	Chicago, Illinois.....	John B. Youmans, M.D., Dean.....	3	634	147
Indiana University School of Medicine.....	Indianapolis ⁴ , Indiana.....	John D. Van Nuys, M.D., Dean.....	3	396	84
State University of Iowa College of Medicine.....	Iowa City, Iowa.....	Mayo H. Soley, M.D., Dean.....	3	278	57
University of Iowa School of Medicine.....	Kansas City ⁵ , Kansas.....	Franklin D. Murphy, M.D., Dean.....	3	308	56
University of Louisville School of Medicine.....	Louisville, Kentucky.....	John W. Moore, M.D., Dean.....	2	325	144 ⁴
Louisiana State University School of Medicine.....	New Orleans, Louisiana.....	Vernon W. Lippard, M.D., Dean.....	90 sem. hrs	308	80
Tulane University of Louisiana School of Medicine.....	New Orleans, Louisiana.....	Maxwell E. Lapham, M.D., Dean.....	3	477	97
Johns Hopkins University School of Medicine.....	Baltimore, Maryland.....	Alan M. Chesney, M.D., Dean.....	degree	297	78
Univ. of Maryland School of Med. & Coll. of Phys. & Surg.....	Baltimore, Maryland.....	H. Boyd Wylie, M.D., Acting Dean.....	3	322	77
Boston University School of Medicine.....	Boston, Massachusetts.....	James M. Faulkner, M.D., Dean.....	3	235	54
Harvard Medical School.....	Boston, Massachusetts.....	C. Sidney Burwell, M.D., Dean.....	2	504	140
Tufts College Medical School.....	Boston, Massachusetts.....	Dwight O'Hara, M.D., Dean.....	4 & degree	394	94
University of Michigan Medical School.....	Ann Arbor, Michigan.....	Albert C. Furstenberg, M.D., Dean.....	3	426	132
Wayne University College of Medicine.....	Detroit, Michigan.....	Hardy A. Kemp, M.D., Dean.....	3	226	60
University of Minnesota Medical School ³	Minneapolis, Minnesota.....	Harold S. Dietl, M.D., Dean.....	3	391	140 ⁴
St. Louis University School of Medicine.....	St. Louis, Missouri.....	Rev. A. M. Schwitalle, S.J., Ph.D., Dean.....	3	432	120
Washington University School of Medicine.....	St. Louis, Missouri.....	Robert A. Moore, M.D., Dean.....	3	360	90
Creighton University School of Medicine.....	Omaha, Nebraska.....	Charles M. Wilhelmj, M.D., Dean.....	3	244	65
University of Nebraska College of Medicine.....	Omaha, Nebraska.....	Harold C. Lueth, M.D., Dean.....	3	293	67
Albany Medical College.....	Albany, New York.....	Robert S. Cunningham, M.D., Dean.....	3	182	40
Long Island College of Medicine.....	Brooklyn, New York.....	Jean A. Curran, M.D., President.....	3	404	92

Name of school by state	Location	Chief executive	1948 premedical requirements by years	No. of students 1947-48	1948 graduates to Jun. 30
University of Buffalo School of Medicine.....	Buffalo, New York.....	Stockton Kimball, M.D., Dean.....	3	273	74
Columbia University College of Physicians and Surgeons.....	New York, New York.....	Willard C. Rappleye, M.D., Dean.....	3	432	100
Cornell University Medical College.....	New York, New York.....	Joseph C. Hinsey, Ph.D., Dean.....	3	315	78
New York Medical College, Flower and Fifth Aves. Hospitals.....	New York, New York.....	J. A. W. Hetrick, M.D., President and Dean.....	3	446	119
New York University College of Medicine.....	New York, New York.....	Currier McEwen, M.D., Dean.....	3	487	132
University of Rochester School of Medicine and Dentistry.....	Rochester, New York.....	George H. Whipple, M.D., Dean.....	3	267	66
Syracuse University College of Medicine.....	Syracuse, New York.....	H. G. Weiskotten, M.D., Dean.....	3	190	41
Duke University School of Medicine ³	Durham, North Carolina.....	Wilbur C. Davison, M.D., Dean.....	3	270	66
Bowman Gray School of Medicine of Wake Forest College.....	Winston-Salem, North Carolina.....	C. C. Carpenter, M.D., Dean.....	3	184	48
University of Cincinnati College of Medicine.....	Cincinnati, Ohio.....	Stanley Dorst, M.D., Dean.....	3	321	76
Western Reserve University School of Medicine.....	Cleveland, Ohio.....	Joseph T. Wearn, M.D., Dean.....	3	312	77
Ohio State University College of Medicine.....	Columbus, Ohio.....	Charles A. Doan, M.D., Dean.....	3	317	72
University of Oklahoma School of Medicine.....	Oklahoma City, Oklahoma.....	Mark R. Everett, M.D., Dean.....	3	289	62
University of Oregon Medical School.....	Portland, Oregon.....	D. W. E. Baird, M.D., Dean.....	3	270	65
Hahnemann Medical College and Hospital of Philadelphia ⁷	Philadelphia, Pennsylvania.....	Charles L. Brown, M.D., Dean.....	3	405	112
Jefferson Medical College of Philadelphia.....	Philadelphia, Pennsylvania.....	William H. Perkins, M.D., Dean.....	3	270	65
Temple University School of Medicine.....	Philadelphia, Pennsylvania.....	William N. Parkinson, M.D., Dean.....	3	621	148
University of Pennsylvania School of Medicine.....	Philadelphia, Pennsylvania.....	Isaac Starr, M.D., Dean.....	3	459	124
Woman's Medical College of Pennsylvania.....	Philadelphia, Pennsylvania.....	Marion Fay, Ph.D., Dean.....	3	479	127
University of Pittsburgh School of Medicine.....	Pittsburgh, Pennsylvania.....	William S. McEllroy, M.D., Dean.....	2	158	35
Medical College of the State of South Carolina.....	Charleston, South Carolina.....	Kenneth M. Lynch, M.D., Dean.....	3	303	75
University of Tennessee College of Medicine.....	Memphis, Tennessee.....	O. W. Hyman, Ph.D., Dean.....	2	211	53
Meharry Medical College.....	Nashville, Tennessee.....	Michael J. Bent, M.D., Dean.....	2	512	99
Vanderbilt University School of Medicine.....	Nashville, Tennessee.....	Ernest W. Goodpasture, M.D., Dean.....	degree	234	58
Southwestern Medical College.....	Dallas, Texas.....	William L. Hart, M.D., Dean.....	3	207	54
University of Texas School of Medicine.....	Galveston, Texas.....	D. Bailey Calvin, M.D., Dean.....	3	224	50
Baylor University College of Medicine.....	Houston, Texas.....	W. H. Moursund, M.D., Dean.....	3	347	80
University of Utah School of Medicine.....	Salt Lake City, Utah.....	Richard H. Young, M.D., Dean.....	3	293	64
University of Vermont College of Medicine.....	Burlington, Vermont.....	William E. Brown, M.D., Dean.....	3	178	36
University of Virginia Department of Medicine.....	Charlottesville, Virginia.....	Harvey E. Jordan, Ph.D., Dean.....	3	153	40
Medical College of Virginia.....	Richmond, Virginia.....	Harvey B. Haag, M.D., Dean.....	3	250	59
University of Wisconsin Medical School.....	Madison, Wisconsin.....	William S. Middleton, M.D., Dean.....	3	314	85
Marquette University School of Medicine.....	Milwaukee, Wisconsin.....	John S. Hirschboeck, M.D., Dean.....	3	350	169

¹None, due to acceleration. ²Another branch is at Berkeley. ³Hospital internship required for graduation. ⁴Another branch is located at Bloomington. ⁵Another branch is located at Lawrence. ⁶Two classes. ⁷On probation. ⁸Another branch is located at Stanford University.

NOTE: The following approved schools of the basic medical sciences (offering only the first two years of medicine) are listed: University of Mississippi School of Medicine, University, Miss., David S. Pankratz, M.D., Dean; University of Missouri School of Medicine, Columbia, Mo., Trawick H. Stubbs, M.D., Dean; Dartmouth Medical School, Hanover, N.H., Rolf C. Sverrisen, M.D., Dean; University of North Carolina School of Medicine, Chapel Hill, N.C., W. Reece Berryhill, M.D., Dean; University of North Dakota School of Medicine (on probation), Grand Forks, N. Dak., Harley E. French, M.D., Dean; University of South Dakota School of Medical Sciences (on probation), Vermillion, S. Dak., Donald Slaughter, M.D., Dean; West Virginia University School of Medicine, Morgantown, W. Va., Edward J. Van Liere, M.D., Dean.

Degrees Granted by Institutions of Higher Education, 1948

Source: U. S. Office of Education.

Field	Bachelor's		Master's		Doctor's	
	Men	Women	Men	Women	Men	Women
Arts.....	5,314	2,962	425	179	63	12
Social sciences.....	1,415	1,042	81	47	.....	.....
Science.....	1,251	238	22	7	.....	.....
Professions:						
Agriculture.....	4,982	130	790	15	151	3
Architecture.....	873	124	86	1	1	.....
Commerce.....	29,402	5,901	1,930	350	35	3
Dentistry.....	1,523	28	75	.....	51	.....
Education.....	8,218	20,865	6,367	5,062	364	75
Engineering.....	29,630	211	3,840	9	233	.....
Fine arts.....	893	2,502	230	210	6	5
Forestry.....	804	6	187	.....	11	.....
Home economics.....	97	7,020	6	538	2	12
Journalism.....	1,953	1,300	197	50	.....	.....
Law.....	9,622	403	366	28	207	8
Library science.....	387	1,113	34	86	4	1
Medicine.....	5,835	772	231	25	11	4
Music.....	1,700	3,451	593	398	18	5
Nursing.....	27	3,174	.....	200	.....	.....
Pharmacy.....	1,565	410	57	8	21	1
Philosophy.....	1,361	318	186	30	31	6
Theology.....	2,974	978	787	330	183	6
Veterinary medicine.....	242	11	18	1	5	.....
Other.....	9,953	4,399	1,745	386	701	64
Total*	171,793	95,100	28,343	13,373	3,918	521

*Includes other fields of study not listed here.

Federal Aid for Vocational Training, by State, 1945

(in thousands of dollars)

Source: U. S. Office of Education.

State	Agricultural education	Trade and industrial education	Home economics education	State	Agricultural education	Trade and industrial education	Home economics education
Alabama.....	269	92	133	Nevada.....	7	12	20
Arizona.....	32	27	26	New Hampshire.....	19	26	20
Arkansas.....	217	46	105	New Jersey.....	60	230	66
California.....	188	206	174	New Mexico.....	35	25	25
Colorado.....	48	53	41	New York.....	211	944	155
Connecticut.....	30	98	45	North Carolina.....	334	112	175
Delaware.....	22	30	20	North Dakota.....	25	19	36
Florida.....	82	95	66	Ohio.....	151	311	191
Georgia.....	276	104	145	Oklahoma.....	191	84	98
Idaho.....	35	22	23	Oregon.....	61	50	41
Illinois.....	230	423	177	Pennsylvania.....	287	505	260
Indiana.....	179	171	110	Rhode Island.....	14	49	17
Iowa.....	156	90	103	South Carolina.....	188	57	96
Kansas.....	130	42	76	South Dakota.....	28	17	33
Kentucky.....	213	81	124	Tennessee.....	256	105	127
Louisiana.....	178	95	93	Texas.....	450	257	258
Maine.....	45	25	37	Utah.....	33	31	22
Maryland.....	56	85	50	Vermont.....	21	25	21
Massachusetts.....	44	286	62	Virginia.....	213	103	116
Michigan.....	202	283	147	Washington.....	85	84	62
Minnesota.....	142	124	98	West Virginia.....	84	74	91
Mississippi.....	265	48	117	Wisconsin.....	185	141	111
Missouri.....	234	166	137	Wyoming.....	24	11	20
Montana.....	40	27	25	Total.....	6,529	6,143	4,405
Nebraska.....	103	46	56				

Number Surviving Through College per 1,000 Pupils

Grade or year	1925- 1926	1926- 1927	1927- 1928	1928- 1929	1929- 1930	1930- 1931	1931- 1932	1932- 1933	1933- 1934	1934- 1935	1935- 1936	1936- 1937
Elementary: Fifth*	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Sixth.....	911	919	928	939	954	943	929	935	944	953	946	954
Seventh.....	815	824	834	847	861	872	884	889	895	892	889	895
Eighth.....	745	754	779	805	825	824	818	831	836	842	839	849
High School: I.....	642	677	714	736	760	770	780	786	792	803	814	839
II.....	509	552	588	624	647	652	651	664	688	711	725	704
III.....	421	453	485	498	512	529	546	570	594	610	587	554
IV.....	370	400	415	432	454	463	481	510	489	512	466	425
Graduates.....	316	333	355	378	403	417	432	455	462	467	439	393
Year of graduation...	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944
College: I.....	112	129	135	137	139	148	154	160	142	129	119	....
Graduates.....	56	60	65	69	70	69	69	47	....	....	....	....
Year of graduation...	1937	1938	1939	1940	1941	1942	1943	1944	....	....	....	....

*Fourth grade in 11-grade system; fifth grade in 12-grade system.

Federal Funds Allocated to the States, June 30, 1948

For Regular School Purposes	Amount	For Emergency School Purposes	Amount
More complete endowment and support of land grant colleges.....	\$ 5,030,000	School lunches.....	\$ 54,000,000
Agric. experiment stations.....	8,950,808	Schools in war areas.....	6,643,000*
Cooperative agricultural extension service.....	27,455,370	Education of veterans†.....	2,122,292,440*
Vocational education below college grade.....	25,035,122	Value of surplus school property:	
Vocational rehabilitation...	18,000,000	Army and Navy donable property.....	201,406,636‡
Total.....	84,471,300	Real property.....	284,473,734‡
		Property of schools enrolling veterans:	
		Construction cost.....	79,446,379§
		Equipment value.....	87,013,725

*Data for 1947. †Includes amounts for subsistence allowance and for tuition, equipment, etc. ‡Data for 2½ years. §Includes \$1,596,680 in "Warehouse Fund" not allocated by states.

Federal Government Allotment for School Lunch Program, 1947 and 1948

State	1947*	1948	State	1947	1948
Alabama.....	\$2,612,601.92	\$2,185,523	Nebraska.....	\$ 482,268.55	\$ 454,044
Arizona.....	439,299.89	323,497	Nevada.....	65,588.41	43,436
Arkansas.....	1,862,156.36	1,431,269	New Hampshire.....	177,162.52	190,656
California.....	3,059,321.63	1,970,097	New Jersey.....	1,299,237.30	1,106,752
Colorado.....	513,902.61	436,517	New Mexico.....	297,878.14	278,163
Connecticut.....	536,835.85	448,492	New York.....	5,066,618.15	2,850,867
Delaware.....	100,256.11	78,464	North Carolina.....	3,773,110.39	2,584,366
Florida.....	1,479,130.39	880,943	North Dakota.....	229,506.21	219,055
Georgia.....	3,071,804.85	2,179,467	Ohio.....	2,759,275.53	2,119,875
Idaho.....	352,018.70	219,552	Oklahoma.....	1,610,694.52	1,138,814
Illinois.....	3,505,540.25	2,122,655	Oregon.....	496,086.80	348,815
Indiana.....	1,569,135.19	1,216,957	Pennsylvania.....	2,186,171.87	2,230,421
Iowa.....	1,302,556.60	855,517	Rhode Island.....	229,927.20	214,436
Kansas.....	698,279.92	632,398	South Carolina.....	2,101,442.17	1,596,273
Kentucky.....	2,130,253.65	1,847,063	South Dakota.....	238,352.81	15,251
Louisiana.....	2,052,185.19	1,505,867	Tennessee.....	2,530,925.48	1,756,409
Maine.....	335,713.01	332,939	Texas.....	4,759,809.93	3,333,157
Maryland.....	762,651.80	617,304	Utah.....	661,971.71	301,606
Massachusetts.....	1,364,433.22	1,106,543	Vermont.....	143,038.84	139,493
Michigan.....	2,150,779.23	1,833,812	Virginia.....	1,562,652.98	1,521,067
Minnesota.....	1,567,180.94	994,184	Washington.....	756,785.04	507,800
Mississippi.....	1,919,371.87	1,740,903	West Virginia.....	1,326,062.35	1,165,312
Missouri.....	1,960,335.04	1,347,876	Wisconsin.....	1,311,140.50	1,086,286
Montana.....	212,954.90	179,347	Wyoming.....	184,238.30	100,292

*Allotment for 1947 includes \$10,000,000 for equipment.

The College Fraternity System

THE COLLEGE fraternity system is as old as the republic in which it serves. It was on the night of December 5, 1776, in the Apollo Room of the Raleigh Tavern in Williamsburg, Virginia, that John Heath, Richard Booker, Thomas Smith, Armistead Smith and John Jones of the College of William and Mary (the second oldest college in the country) formed the first Greek-letter society, Phi Beta Kappa, whose letters stand for a Greek motto usually translated as "Love of Wisdom (or Philosophy), the guide of life." The society prospered and adopted all the features which characterize the modern fraternity: a ritual with secret obligations, a motto and a grip. By 1826, the fraternity became honorary and in 1875 it became a society when the first women members were elected. Today it has a membership in the neighborhood of 110,000, the largest in the U. S.

Kappa Alpha Society was established at Union College, Schenectady, New York, in the fall of 1825. It, in turn, was followed by the establishment at the same institution of Sigma Phi and Delta Phi, both in 1827, and these three were known as the "Union Triad." In later years, three other fraternities came into existence at Union College and were responsible for that college earning its sobriquet as the "Mother of Fraternities."

The first Greek-letter sorority was Kappa Alpha Theta, founded at De Pauw University in January, 1870, although other non-Greek-letter sororities had preceded it. The Adelphean Society was founded in 1851 at Wesleyan College in Georgia; the Philomathean Society was founded in 1852 at the same school and the I. C. Sororis was born in 1867 at Monmouth College. These three societies later adopted Greek letters. Adelphean became Alpha Delta Pi; Philomathean became Phi Mu and I. C. Sororis adopted Pi Beta Phi.

These organizations marked the beginning of the fraternal system, but the real expansion came after 1900. The growth since that date has been tremendous.

Fraternities (and sororities) are divided into three groups: social or academic, professional and honor groups. These groups have their own interfraternity associations which originally were founded to dispel the clannish bitterness and rivalry between the fraternities and to try to eradicate the antagonism and prejudice of public opinion against the fraternity system and its abuses. It is to the credit of these institutions that most of the evils have been overcome.

On October 9-10, 1943, these interfraternity associations gathered in New York and formed the *National Conference of*

College Fraternities and Societies, which drew up a constitution for the purpose of defining the various groups and setting up rules and regulations for the member bodies.

The member bodies of the National Conference of College Fraternities and Societies, whose President is Dean Joseph A. Park, Ohio State University, Columbus 10, Ohio, are as follows:

The *National Interfraternity Conference (NIC)*, founded in New York City on November 18, 1909. It has a membership of 60 social fraternities, and its chairman is Dr. Gilbert W. Mead, Washington College, Chestertown, Maryland.

The *National Panhellenic Conference (NPC)*, a group of social sororities with an original membership of 20. Its chairman is Miss L. Pearle Green, 302 Fall Creek Drive, Ithaca, New York.

On November 13, 1947, the *Association of Educational Sororities (AES)*, with its membership of 6 sororities, dissolved and joined the NPC. Five other groups were also accepted by the NPC at that time, bringing its strength up to 31.

The *Professional Interfraternity Conference (PIC)* was organized on March 2, 1928, in Washington, D. C. It has a membership of 28 men's professional fraternities, and its President is R. W. Lemley, 134 N. La Salle St., Chicago 2, Illinois.

The *Professional Panhellenic Association (PPA)* was founded in 1925. It has a membership of 14 sororities, and its President is Mrs. Herbert Stevenson, 232 Clark Street, Westfield, New Jersey, and

The *Association of College Honor Societies (ACHS)*, which was founded in New York on October 2, 1925. It has a membership of 19 non-social fraternities, and its President is Dr. Lawrence R. Guild, University of Southern California, Los Angeles 7, California.

Not belonging to this group is the independent *Association of Social Fraternities (ASF)* with a membership of 2.

Further information concerning the vital statistics of the various fraternities and sororities, their membership, number of active chapters, date of founding and list of officers, may be found in the following publications:

1. The annual directory issue (first month in the year) of *The Fraternity Month*, published by Leland Publishers Inc., St. Paul 4, Minnesota.

2. *Banta's Greek Exchange*, published by George Banta Publishing Co., Menasha, Wisconsin.

Museums of the United States

Source: Questionnaires to Museums.

NEW YORK CITY

American Academy of Arts and Letters: 633 W. 155th St., New York 32. Open: wkdys. & Sun. 2-5 (closed Mon.) Free.

Permanent collection of paintings and sculpture by members of Academy. Spring exhibition of works by newly elected members.

American Museum of Natural History: Central Park W. at 79th St., New York 24. Open: wkdys. 10-5, Sun. & hldys. 1-5. Free. Covers all branches of natural sciences except systematic botany with thorough exhibits in each field. Large habitat groups of animals. Library.

Brooklyn Museum: Eastern Pkwy., Brooklyn 17, N. Y. Open: wkdys. 10-5, Sun. & hldys. 1-5 (closed Xmas). Free.

European and American paintings. Important Egyptian collection. Exhibits showing Primitive and New World cultures. American rooms. Industrial design laboratory. Art school. Library and concerts.

Cloisters: Ft. Tryon Pk., New York 33. Open: wkdys. 10-5 (closed Mon.), Sun. 1-5 (May-Sept. 1-6), hldys. 1-5. Free (Fri. 25c.).

Cloisters, chapel, chapter house reconstructed from parts of old European structures. Frescoes, polychromed statues, stained glass, Gothic tapestries. Branch of Metropolitan Museum of Art.

Frick Collection: 1 E. 70th St., New York 21. Open: wkdys. 10-5 (closed Mon.), Sun. & hldys. 1-5. Free.

Paintings, watercolors, prints, drawings of 14th to 19th centuries. Italian Renaissance and French sculpture. Chinese and French porcelain. Concerts.

Hispanic Society of America: Broadway bet. 155th and 156th Sts., New York 32. Open: wkdys. 10-4:30, Sun. 1-5. Library open: wkdys. 1-4:30 (closed Sun., Mon., hldys., mo. of Aug.). Free.

Devoted to Spanish and Portuguese art, literature. Paintings, sculpture, ceramics, metalwork, furniture, textiles, manuscripts.

Metropolitan Museum of Art: 5th Ave. at 82nd St., New York 28. Open: wkdys. 10-5, Sun., hldys. 1-5. Free.

Extensive collection of European and American paintings and prints. Egyptian and Asiatic decorative arts and crafts. Ceramics, oriental rugs, musical instruments, arms and armor. American period rooms. Costumes and textiles. Library. See also Cloisters.

Museum of Modern Art: 11 W. 53rd St., New York 19. Open: wkdys. 12-7, Sun. & hldys. 1-7. Adm. 35c.

Founded to encourage study of modern art and its application to manufacturing and practical life. Constantly changing exhibitions of contemporary painting, sculpture, photography, architecture, industrial art, films.

Museum of Non-Objective Painting: 1071 5th Ave., New York 28. Open: wkdys. 10-6 (closed Mon.), Sun. 12-6. Free.

Paintings by the masters of non-objective art. Group loan shows. Bach and Beethoven music.

Museum of the American Indian, Heye Foundation: Broadway at 155th St., New York 32. Open: Tues.-Sat. 2-5 (closed Sun., Mon., hldys.). Free.

Archaeology and ethnology of Americas from Arctic Circle to Tierra del Fuego. Library.

Museum of the City of New York: 5th Ave. at 104th St., New York 29. Open: wkdys. 10-5 (closed Mon.), Sun. 1-5, closed Xmas. Free.

History of New York City. Period costumes, furniture, miniature scenes, portraits, paintings, manuscripts, silver, toys, dolls. Fire engines, horse car, "Tally-ho" coach. Theater, music exhibits.

National Academy of Design: 1083 5th Ave. (at 90th St.) New York 28. Open: wkdys. & Sun. 1-5 (during exhibitions). Adm. 25c. Permanent collection not available at present for exhibition. Special annual exhibitions of selected organizations.

New York Historical Society: Central Park W. at 77th St., New York 24. Open: wkdys. & Sun. 1-5, (Sat. 10-5, closed Mon., NY Day, July 4, Thns. Day, Xmas, month of Aug.). Free.

New York city and state historical exhibits. Early American paintings and portraits. American folk arts and crafts. Audubon watercolors of birds. John Rogers statuette groups. Library.

New York Museum of Science and Industry: 30 Rockefeller Plaza, New York 20. Open: every day 10-10. Adm. 50c.

Exhibits of instruments, techniques, developments of science and industry. Many arranged for operation by visitors.

Roosevelt (Theodore) Museum: 28 E. 20th St., New York 3. Open: wkdys. 10-5 (closed Mon.), Sun. & hldys. 1-5 (closed Thns. Day, Xmas, NY Day). Free.

Restored birthplace of Roosevelt. Mounting of lion shot by him in Africa. Photographs, letters, trophies, personal items. Extensive cartoon collection.

Whitney Museum of American Art: 10 W. 8th St., New York 11. Open: wkdys. & Sun. 1-5 (closed Mon. & June 1-Sept. 15). Free. Sculpture, paintings, watercolors, drawings, prints by American artists. Annual exhibitions of American contemporaries.

CHICAGO

Art Institute of Chicago: Michigan Ave. at Adams St., Chicago 3, Ill. Open: wklys. 9-5, Sun. 12-5. Adm. 30c. (free Wed., Sat., Sun., hldys.).

Paintings, sculpture, prints, drawings. Oriental arts; European, American decorative arts. Thorne Miniature Rooms. Library, art school.

Chicago Academy of Sciences, Museum of Natural History: 2001 N. Clark St., Chicago 14, Ill. Open: wklys. 1-4 (Sat. 10-5, closed Mon.), Sun. & hldys. 10-5. Free.

Emphasis on regional natural history. Habitat groups of existing and prehistoric animals. Study collections of North American flora and fauna.

Chicago Historical Society: N. Clark St. at North Ave., Chicago, Ill. Open: wklys. 9:30-4:30, Sun. 12:30-5:30. Free (Sun., Mem. Day, July 4, Lab. Day 25c.).

Exhibits and period rooms from discovery and exploration of America to present. Special emphasis on history of Chicago. Washington, Lincoln exhibits.

Chicago Natural History Museum (formerly Field Museum): Roosevelt Rd. at Lake Shore Dr., Chicago 5, Ill. Open: wklys. & Sun.—Nov.—Feb. 9-4; May-Aug. 9-6; Mar., Apr., Sept., Oct. 9-5 (closed Xmas and NY Day). Adm. 30c. (free Thurs., Sat., Sun.).

Exhibits in anthropology, botany, geology, zoology. Prehistoric skeletons. Dioramas of Stone-Age Europe. Vast Egyptian collection. Model of moon.

Museum of Science and Industry: 57th St. at Lake Michigan, Chicago 37, Ill. Open: fall & winter—wklys. 9:30-4 (Sat. 9:30-5:30), Sun. & hldys. 9:30-7; spring & summer—wklys. 9:30-5:30, Sun. & hldys. 9:30-7. Free (small fee to several exhibits).

Over 8 acres of exhibits. Working coal mine. Full-size street of 1910. Fully equipped farm. Evolution of automobile and airplane. Working iron foundry. Radar and navigation exhibits. Exhibits in physics, medicine, chemistry.

Oriental Institute of the University of Chicago: 1155 E. 58th St., Chicago 37, Ill. Open: June 1-Nov. 30—wklys. 10-5, Sun. 11-5; Dec. 1-May 31—wklys. 1-5 (Sat. 10-5), Sun. 11-5. Free.

Representative collections of Near Eastern objects, including 40-ton human-headed winged bull from Khorsabad and 16-ft. statue of Tutenkhamon from Egypt.

Vanderpoel (John H.) Memorial Art Gallery: Longwood Dr. at 96th St., Chicago 43, Ill. Open: wklys. & Sun. 9-5 (closed hldys.). Free.

Paintings, watercolors, etchings, sculpture. Attempts to serve the person uninformed in art as well as the connoisseur. Stated to be, "The unique gallery in the world."

WASHINGTON, D.C.

Corcoran Gallery of Art: 17th St. at New York Ave., N. W., Washington 6, D. C. Open: wklys. 10-4:30 (Mon. 12-4:30, Sat. 9-4:30), Sun. & hldys. 2-5 (closed Xmas & July 4). Free.

Specializes in American art, but has notable collection of 17th century Dutch and 19th century French paintings. Persian rugs, Italian majolica, Greek and Roman antiquities. Bayre bronzes. Large collection of American sculpture.

Freer Gallery of Art: Independence Ave. at 12th St., Washington 25, D. C. Open: wklys. & Sun. 9-4:30 (closed Xmas). Free.

Oriental paintings, sculpture, bronzes, pottery, metalwork, manuscripts. Largest extant Whistler collection.

National Air Museum: The Mall, 10th and Jefferson Dr., Washington 25, D.C. Open: every day but Xmas 9-4:30. Free.

Full-sized aircraft, including Lindbergh's "Spirit of St. Louis." Engines, propellers, structure specimens, instruments, flight clothing, etc.

National Collection of Fine Arts: Constitution Ave. at 10th St., Washington 25, D. C. Open: wklys. & Sun. 9-4:30. Free.

Art collections given by Harriet Lane Johnston, Ralph Cross Johnson, William T. Evans, John Gellatly and others.

National Gallery of Art: Constitution Ave. at 6th St., Washington 25, D. C. Open: wklys. 10-5, Sun. 2-10, closed Xmas & New Year's Day. Free.

Paintings, sculpture, drawings, prints, decorative arts given by Mellon, Kress, Widener, Rosenwald, Dale, the Booths and others. U.S. Government Index of American Design. Concerts.

Smithsonian Institution: on the Mall, Washington 25, D. C.

Maintains the following museums and art galleries: Freer Gallery of Art, National Air Museum, National Collection of Fine Arts, National Gallery of Art, U. S. National Museum. See those entries.

United States National Museum: on the Mall, Washington 25, D. C. Open: wklys. & Sun. 9-4:30. Free.

Exhibits in anthropology, biology, geology, engineering, industry, history. Relics of Washington and Lincoln.

PHILADELPHIA

Academy of Natural Sciences of Philadelphia: 19th and the Parkway, Philadelphia 3, Pa. Open: wklys. 9-5 (summer 9-4), Sun. 1-5. Free.

Large habitat groups of animals of North America, Africa, Asia. Hall of Earth History and Audubon Bird Hall. Minerals and gems. Library.

Franklin Institute of the State of Pennsylvania for the Promotion of the Mechanic Arts: 20th St. at Benj. Franklin Pkwy.,

Philadelphia 3, Pa. Open: wkdys. 12-5 (Sat. 10-5, closed Mon.), Sun. 12-5. Adm. 60c.

Exhibits in various branches of science, many allowing operation by visitors. Planetarium, observatory, library.

Pennsylvania Academy of the Fine Arts: Broad and Cherry Sts., Philadelphia 2. Open: wkdys. 10-5 (closed Mon., July 4, Thns. Day, Xmas, NY Day), Sun. & hldys. 1-5. Free (except during two annual exhibitions).

Permanent collections include American art from Revolution to present. Special winter exhibit of painting, sculpture. Special fall exhibit of water colors, prints, miniatures.

Philadelphia Museum of Art: Parkway at 26th St., Philadelphia 30, Pa. Open: wkdys. & Sun. 9:30-5 (closed Xmas & NY Day). Free.

Art from beginning of Christian era. Paintings: old masters, contemporary French, American, Mexican. Prints, decorative arts, period rooms. Architectural units. Medieval and Oriental arts. Movies.

MUSEUMS IN OTHER CITIES

Alabama Museum of Natural History: University of Alabama, Tuscaloosa. Open: wkdys. & Sun. 8-5. Free.

All phases of natural history with emphasis on geology. *See also* Mound State Monument Archaeological Museum.

Albright Art Gallery. *See* Buffalo Fine Arts Academy.

Atkins Museum. *See* Nelson Gallery.

Baseball Hall of Fame and Museum, Natl.: Lake Rd., Route 80, Cooperstown, N. Y.

Relics, pictures, documents of baseball history. Bronze plaques of game's immortals. Part of N. Y. State Historical Assn. *See also* Sports in index.

Berkshire Museum: Pittsfield, Mass. Open: wkdys. 10-5 (closed Mon.), Sun. 2-5. Free.

Art objects from Egyptian to modern times. Paintings and sculpture. Indian and Eskimo exhibits. Original "One Horse Shay."

(Boston) Museum of Fine Arts: 465-479 Huntington Ave., Boston 14, Mass. Open: wkdys. 9-5 (closed Mon.), Sun. 1:30-5:30. Free.

European and American paintings. Early American silver, furniture, interiors. Print collection largest in U. S. Asiatic, Egyptian, Classical collections.

Buffalo Fine Arts Academy—Albright Art Gallery: 1285 Elmwood Ave., Buffalo 9, N. Y. Open: wkdys. 10-5 (Mon. 2-6, Wed. 2-10), Sun. 2-6. Free.

European and American paintings, including contemporary works. Sculpture court. Small sculptures and ceramics. Religious art, including illuminated manuscripts. Library and concerts.

Buffalo Museum of Science: Humboldt

Park, Buffalo, N. Y. Open: wkdys. 10-5 (Sat. 9-5), Sun. & hldys. 1:30-5:30. Free.

African and South Sea exhibits. Chinese pottery. Babylonian seals. First and rare editions of scientific monographs.

California Academy of Sciences: Golden Gate Park, San Francisco 18. Open: wkdys. & Sun. 10-5. Free.

North American and African habitat groups. Exhibits of large game fish. Reptiles, plants, fossils, minerals. Aquarium.

California Palace of the Legion of Honor: Lincoln Park, San Francisco. Open: every day of year 10-5. Free.

European and American paintings. Rodin sculpture and drawings. Furniture, bronzes, porcelain, tapestries. Egyptian art. Organ recitals and movies.

Carnegie Institute: 4400 Forbes St., Pittsburgh 13, Pa. Open: wkdys. 10-6, Sun. 2-6. Free.

Department of Fine Arts: European and American paintings, ancient sculpture. Carnegie Museum: exhibits in history and natural history. Decorative and useful arts. Music Hall. Carnegie Library.

Cincinnati Art Museum: Eden Park, Cincinnati 6, Ohio. Open: wkdys. 10-5 (Tues. 10-10), Sun. 2-5. Free.

Paintings, prints, porcelain, ancient and modern sculpture. Cincinnati interiors of 1800's. U. S. Playing Card Co. collection. Library and movies.

Cleveland Museum of Art: Wade Park, Cleveland 6, Ohio. Open: wkdys. 9-5 (Wed. 9 A.M.-10 P.M., closed Mon.), Sun. 1-6. Free.

Classical and modern art of all nations and ages; considerable art of Cleveland. Paintings, sculpture, graphic arts, furniture, textiles. Byzantine, Medieval, Early American collections.

Cleveland Museum of Natural History: 2717 Euclid Ave., Cleveland 15, Ohio. Open: wkdys. 10-4, Sun. 2:30-5:30. Free.

Mammals, birds, reptiles, fish, insects, plants, minerals. Most complete mastodon yet found. Hanna Star Dome, showing constellations month by month.

Colorado Museum of Natural History: City Park, Denver 6. Open: wkdys. 9-5, Sun. 12-5. Free.

Natural history of North and South America. Habitat groups of mammals and birds. Minerals, dinosaur skeletons.

Colorado Springs Fine Arts Center: 30 W. Dale St., Colorado Springs, Colo. Open: wkdys. 10-5 (closed Mon. from Sept. thru May), Sun. 1:30-5. Free.

Contemporary paintings. Latin American and Southwestern folk arts and crafts. Navajo sand-painting reproductions. Concerts, theater arts.

Currier Gallery of Art: 192 Orange St., Manchester, N. H. Open: wkdys. 10-5, Sun. 2-5. Free.

Paintings, prints, drawings, sculpture, glass, tapestries. American furniture and decorative arts of 17th to 19th centuries. Concerts, lectures, movies.

Denver Art Museum: City and County Bldg., Denver, Colo. Open: wkdys. 9-5 (Mon. 2-5, 7-9), Sun. 2-5. Free.

European and American paintings and decorative arts. Oriental, South Sea, American Indian arts and crafts. Large collection of bullfight paraphernalia.

Detroit Institute of Arts: 5200 Woodward Ave., Detroit 2, Mich. Open: Sept.-June—wkdys. 1-10 (Sat. 9-6, closed Mon.), Sun. 9-6; July & Aug.—wkdys. & Sun. 9-6 (closed Mon.); closed all hldys. Free.

European and American paintings. Large murals by Diego Rivera. Sculpture, furniture, glass, gold work, ivory, graphic arts, textiles. Lectures, movies, gallery talks.

Farmers' Museum: Lake Rd., Route 80, Cooperstown, N. Y. Open: May-Oct. every day 9-6. Adm. 50c. (80c. incl. Fenimore House).

Early farm and handicraft tools. Schoolhouse, country store, smithy. Cardiff "Giant." Operated by N. Y. State Historical Assn.

Fenimore House: Lake Rd., Route 80, Cooperstown, N. Y. Open: wkdys. 9-5 (Sat. 9-12), closed Sun.; open every day May-Oct. 9-6. Adm. 50c. (80c. incl. Farmers' Museum).

American portraits, genre paintings. Browere life masks of Founding Fathers. Hamilton-Burr Room. James Fenimore Cooper Collection. Operated by N. Y. State Historical Assn.

Heard Museum: 22 E. Monte Vista Rd., Phoenix, Ariz. Open: wkdys. & Sun. 1-5 (closed Mon. from Nov. 1-May 1). Free.

Indian, other primitive arts: pottery, jewelry, utensils, baskets, blankets, etc. Lectures.

Herron (John) Art Museum: 110 E. 16th St., Indianapolis, Ind. Open: wkdys. 9-5 (closed Mon. & hldys.), Sun. 1-6. Free.

European paintings from Renaissance to present. American paintings of 19th and 20th centuries. Egyptian and Asiatic sculpture and ceramics.

Huntington (Henry E.) Library and Art Gallery: San Marino 15, Calif. Open: wkdys. & Sun. 1-4:30 (closed Mon. and during Oct.). Free (reservations must be made).

18th century British paintings. Library of English and American history and literature. Gutenberg Bible. Franklin's autobiography in his handwriting. Botanical garden.

Layton Art Gallery: 758 N. Jefferson St., Milwaukee 2, Wis. Open: wkdys. 9-5, Sun. 2-5. Free.

Exhibitions of contemporary artists and craftsmen. Special exhibitions, lectures.

Los Angeles County Museum of History, Science and Art: Exposition Park, Los Angeles 7, Calif. Open: wkdys. 10-5 (Mon. 1-5, Fri. 10-5, 7-10), Sun. & hldys. 1-5. Free.

European, American art in historical sequence galleries. California History Hall. Prehistoric skeletons. Lectures, concerts, movies, library.

Mint Museum of Art: 501 Eastover Rd., Charlotte, N. C. Open: wkdys. 10-5 (closed Mon.), Sun. 3-5. Museum closed July 1-Sept. 15. Free.

American and European paintings and prints. Period furniture. Relics of former U. S. branch mint. Eagle on façade believed to be largest carved wooden eagle in world.

Mound State Monument Archaeological Museum: Moundville, Ala. Open: wkdys. & Sun. 8-5. Adm. 25c.

Uncovered Indian burials, etc., of Moundville Indians. Operated by Alabama Museum of Natural History.

Navajo Ceremonial Art, Museum of: Camino Lejo, near old Pecos Rd., Santa Fe, N. Mex. Open: wkdys. 9-12, 1-4:30 (closed Mon.), Sun. 3-5. Adm. 25c.

Sand paintings, ceremonial objects, baskets, blankets, silver. Music records of chants. Comparative material from Asia and elsewhere. Library.

Nelson (William Rockhill) Gallery of Art and Atkins Museum of Fine Arts: 4525 Oak, Kansas City 2, Mo. Open: wkdys. 10-5 (Fri. 1-5, closed Mon.), Sun. & hldys. 2-6 (closed NY Day, July 4, Thnks. Day, Xmas). Also open Wed. & Fri. eves. 7-10 from Oct. 1-Apr. 30. Adm. 25c. (free Sat., Sun., hldys., Wed. & Fri. eves.).

European paintings from 13th century to present. Extensive Chinese collection. Egyptian, Greek, Roman collections. English pottery. Concerts and movies.

New York State Historical Association: Lake Rd., Route 80, Cooperstown, N. Y.

Maintains the following: Baseball Hall of Fame, Farmers' Museum, Fenimore House. See those entries.

Newark Museum: 49 Washington St., Newark 2, N. J. Open: Oct.-June—wkdys. 12-5:30 (Wed. & Thur. 12-5:30, 7-9:30), Sun. & hldys. 2-6; July-Sept.—wkdys. 12-5 (Thur. 12-5, 6:30-9), Sun. & hldys. 2-6. Free.

American painting and sculpture, including contemporary work. Outstanding Tibetan collection. Coins of all nations. Exhibits in mechanics, astronomy, biology, anthropology. Concerts.

Ringling (John and Mable) Museum of Art: Sarasota, Fla. Open: every day 9-4:30 (Residence 10-4:30). Adm.: Art Museum 50c. Residence (incl. Circus Museum), \$1.

Collection of Baroque and other paintings in Art Museum. Rare household

furnishings in Ringling Residence. Museum of the American Circus opened on Residence grounds in 1948.

Rosacruzian Egyptian, Oriental Museum: San Jose, Calif. Open: wkdys. 9-5 (Sat. 9-1), Sun. 12-5. Free.

Egyptian and Oriental antiquities. Mum-mies, statuary, jewelry, utensils, cloth-ing. Reproductions of Egyptian rock tomb and temple.

(St. Louis) City Art Museum: Forest Park, St. Louis 5, Mo. Open: wkdys. & Sun. 10-5 (Mon. 2:30-9:30). Free.

Oriental and Western art and decorative arts. Paintings, sculpture, prints, ceram-ics, oriental rugs. Period rooms.

San Diego, Fine Arts Gallery of: Plaza de Panama, Balboa Park, San Diego, Calif. Open: wkdys. 10:30-5 (Sat. 9-5, closed Mon.), Sun. 1-5:30. Free.

Old European and modern American paintings, featuring also old and modern Spanish and modern French. Important collection of original prints. Old Asiatic arts. Library.

San Diego Society of Natural History—Natural History Museum: San Diego, Calif. Open: wkdys. & Sun. 9-5 (closed Xmas). Free.

Mammals, birds, fossils, shells, plants, insects, minerals. Emphasis on South-western U. S., Sonora, Lower California. Library.

San Francisco Museum of Art: War Memorial Bldg., San Francisco, Calif. Open: wkdys. 12-10 (Sat. 12-9), Sun. 1-5. Free.

Contemporary European and American paintings, drawings, prints, including work by San Francisco artists. Concerts and movies. Library.

Southwest Museum, Inc.: Marmion Way at

Museum Dr., Highland Pk., Los Angeles, Calif. Open: wkdys. & Sun. 1-5 (closed Mon., Xmas, July 4). Free.

American Indian exhibits, ancient and modern. Casa de Adobe, reproduction of adobe hacienda, located at 4605 N. Fl-gueroa St. Library, lectures.

Toledo Museum of Art: Monroe at Scott-wood, Toledo 2, Ohio. Open: wkdys. 9-5 (Mon. 1-5), Sun. 2-6. Free.

Paintings by El Greco, Velasquez, Goya, Rembrandt, Steen. One of world's largest collections of ancient glass. Library, con-certs.

Virginia Museum of Fine Arts: Boulevard at Grove Ave., Richmond 20. Open: wkdys. 9:30-5 (Wed. 2-10, closed Mon.), Sun. 2-5:30. Free (Tues., Thur., Fri., 25c.).

European, American, Oriental, Pacific Island art. Special collections: modern French, American paintings, Russian Crown Jewels. Statewide educational programs.

Walters Art Gallery: Charles and Centre Sts., Baltimore 1, Md. Open: wkdys. 11-5 (July & Aug. 1-4), Sun. & hldys. 2-5 (closed NY Day, July 4, Thinks. Day, Xmas). Free.

Art from ancient empires to 19th century Europe. Important collections of Etrus-can art and medieval illuminated books. Original manuscript of "Star-Spangled Banner."

Worcester Art Museum: 55 Salisbury St., Worcester 2, Mass. Open: wkdys. 10-5 (Tues. in Nov.-Apr. 10-10), Sun. 2-5 (Oct.-June 2-6), hldys. 2-5 (closed July 4, Thinks. Day, Xmas). Free.

Art from Egyptian to modern times, in-cluding Far East. Emphasis on painting and sculpture. Classes, lectures, concerts, films. School.

The Statue of Liberty

The Statue of Liberty ("Liberty Enlight-ening the World") is a 225-ton bronze fe-male figure, 152 ft. 5 in. in height, facing the ocean from Bedloe's Island in New York Harbor. The right hand holds aloft a torch, and the left hand carries a tablet upon which is inscribed: "July 4, 1776."

The statue was designed by Frédéric Au-guste Bartholdi, at the request of the French government, as a present to the U. S. to commemorate the centennial of American independence. Its cost of \$450,000 was met by popular subscription in France.

The pedestal, 151 ft. 1 in. in height, was erected by the U. S., and its cost of \$350,-000 was met by popular subscription in this country. The cornerstone was laid Aug. 5, 1884, and the unveiling of the statue took place Oct. 28, 1886.

The head of the statue can accommodate

forty persons, and the torch, which is now closed to the public, can hold twelve. The U. S. Lighthouse Service maintains the light in the torch, and since 1916 the statue has been illuminated at night by floodlights.

On a tablet inside the main entrance of the pedestal is engraved the following sonnet, written by Emma Lazarus:

The New Colossus

Not like the brazen giant of Greek fame,
With conquering limbs astride from land to land;
Here at our sea-washed, sunset gates shall stand
A mighty woman with a torch, whose flame
Is the imprisoned lightning, and her name
Mother of Exiles. From her beacon hand
Glows world-wide welcome; her mild eyes command
The air-brighted harbor that twin cities frame.
"Keep, ancient lands, your storied pomp!" cries she
With silent lips. "Give me your tired, your poor,
Your huddled masses yearning to breathe free,
The wretched refuse of your teeming shore.
Send these, the homeless, tempest-tost to me,
I lift my lamp beside the golden door."

Leading Daily U. S. Newspapers by Net Paid Circulation

Source: A.B.C. Publisher's statements for period ending March 31, 1948.

(M—Morning; AD—All Day; E—Evening; M & E—Morning and Evening; S—Sunday)

City and Newspaper	Circulation	City and Newspaper	Circulation
New York DAILY NEWS	2,349,342 M	Los Angeles NEWS	281,838 AD
	4,665,534 S	Cleveland PRESS	280,739 E
New York DAILY MIRROR	1,048,011 M	St. Louis GLOBE-	
	2,240,535 S	DEMOCRAT	279,439 M
Chicago TRIBUNE	985,523 M		380,265 S
	1,644,847 S	New York POST &	
Philadelphia BULLETIN	784,349 E	HOME NEWS	275,318 E
	683,326 S		313,495 S
New York JOURNAL &		Buffalo NEWS	273,359 E
AMERICAN	711,469 E	St. Louis POST-DISPATCH	272,198 E
	1,262,085 S		415,556 S
Philadelphia INQUIRER	704,947 M	Wash. D. C. TIMES HERALD	265,393 AD
	1,056,404 S		315,533 S
Chicago SUN-TIMES	672,848 AD	Pittsburgh PRESS	264,994 E
	823,276 S		496,734 S
New York TIMES	542,461 M	Cleveland PLAIN DEALER	255,365 M
	1,131,064 S		443,655 S
Chicago HERALD-			253,488 E
AMERICAN	541,494 E	Boston: { TRAVELER	
	1,180,921 S	HERALD	143,386 M
Chicago DAILY NEWS	494,857 E		256,602 S
Detroit NEWS	432,089 E	Newark NEWS	242,840 E
	554,187 S		179,889 S
Los Angeles HERALD &		San Francisco EXAMINER	241,154 M
EXPRESS	428,007 E		626,161 S
Detroit TIMES	423,204 E	Atlanta JOURNAL	239,988 E
	631,248 S		298,545 S
Los Angeles EXAMINER	408,573 M	Baltimore: { NEWS-POST	226,464 E
	889,979 S	AMERICAN	362,463 S
Los Angeles TIMES	404,513 M	Portland OREGONIAN	223,655 M
	793,062 S		280,036 S
Detroit FREE PRESS	402,991 M		218,658 M
	470,676 S	Des Moines: { REGISTER	218,658 M
Boston: { RECORD	387,013 M		500,437 S
AMERICAN	210,254 E		150,045 E
ADVERTISER	696,906 S	Wash. D. C. STAR	209,881 E
New York WORLD			232,794 S
TELEGRAM	382,234 E	Pittsburgh SUN-	
Boston POST	372,027 M	TELEGRAPH	209,455 E
	287,408 S		616,240 S
Kansas City: { STAR	368,979 E	Baltimore SUN	192,416 E
	375,622 S		169,468 M
	360,474 M		305,658 S
New York HERALD		Boston GLOBE	185,736 E
TRIBUNE	335,690 M		133,704 M
	716,016 S		397,882 S
Milwaukee JOURNAL	314,531 E	Omaha WORLD-HERALD	121,248 M
	372,804 S		111,289 E
New York SUN	303,296 E		235,541 S
Pittsburgh POST-GAZETTE	284,295 M	Fort Worth STAR-	
	283,924 E	TELEGRAM	107,117 M
Minneapolis: { STAR	151,192 M		104,723 E
TRIBUNE	565,979 S		168,090 S

Major U. S. News Services

The Associated Press (AP), 50 Rockefeller Plaza, New York 20, N. Y.

City News Service of Los Angeles, Inc., 132 West First St., Los Angeles 12, Calif.

Columbia News Service, 60 East 42nd St., New York 17, N. Y.

Intercity News Service, 103 Park Ave., New York 17, N. Y.

International News Service, 235 East 45th St., New York 17, N. Y.

International News Photos Inc., 326 West Madison St., Chicago 6, Ill.

English Language Daily and Sunday U. S. Newspapers, by State

(as of Sept. 30, 1946)

Source: Editor & Publisher.

State	Morning papers & circulation		Evening papers & circulation		Total M & E circulation	Sunday papers & circulation	
Alabama	3	138,552	16	405,775	544,327	10	407,160
Arizona	5	79,980	7	60,057	140,037	4	85,968
Arkansas	5	137,849	27	178,854	316,703	9	266,994
California	25	1,527,055	96	2,072,740	3,599,795	24	3,062,425
Colorado	4	104,257	22	302,442	406,699	7	473,104
Connecticut	6	142,903	20	438,619	581,522	7	403,282
Delaware	1	19,861	1	58,093	77,954	1	19,794
D. C.	2	298,369	3	451,058	749,427	3	696,004
Florida	10	456,809	26	348,036	804,845	23	675,977
Georgia	5	298,162	21	393,038	691,200	12	701,822
Idaho	4	53,673	11	59,684	113,357	5	77,664
Illinois	9	1,629,691	81	2,340,565	3,970,256	17	4,011,267
Indiana	15	388,321	78	1,006,937	1,395,258	15	642,246
Iowa	3	270,302	41	612,407	882,709	8	715,847
Kansas	4	157,974	49	423,029	581,003	9	350,037
Kentucky	9	234,390	22	357,154	591,544	14	423,534
Louisiana	5	251,450	12	308,762	560,212	5	385,486
Maine	5	154,188	5	68,430	222,618	2	150,455
Maryland	4	203,340	8	477,255	680,595	3	643,262
Massachusetts	9	1,221,807	47	1,538,539	2,760,346	11	1,897,314
Michigan	3	478,486	50	1,585,945	2,064,431	13	1,938,172
Minnesota	4	288,914	27	654,083	942,997	4	722,414
Mississippi	5	61,339	15	139,329	200,668	7	129,860
Missouri	7	731,391	46	1,054,487	1,785,878	10	1,269,566
Montana	6	88,824	9	46,635	135,459	8	121,066
Nebraska	5	161,879	18	243,822	405,701	6	302,273
Nevada	2	9,826	6	32,766	42,592	1	11,259
New Hampshire	1	24,562	8	71,607	96,169	1	17,191
New Jersey	7	248,600	23	783,945	1,032,545	9	395,718
New Mexico	2	29,309	13	72,841	102,150	7	58,426
New York	23	4,922,366	78	3,635,931	8,558,297	20	11,073,126
North Carolina	8	395,718	33	357,558	753,276	12	481,595
North Dakota	3	52,733	9	75,772	128,505	2	74,842
Ohio	9	612,838	90	2,270,195	2,883,033	18	1,641,878
Oklahoma	8	249,295	43	368,138	617,433	38	528,825
Oregon	4	216,446	17	293,179	509,625	6	496,192
Pennsylvania	29	1,586,625	104	2,589,770	4,176,395	12	2,936,544
Rhode Island	1	45,527	6	209,287	254,814	2	162,575
South Carolina	7	216,831	8	112,271	329,102	6	233,421
South Dakota	1	2,265	11	132,274	134,539	5	80,361
Tennessee	8	431,559	20	461,378	892,937	13	705,744
Texas	22	802,703	82	1,190,552	1,993,255	64	1,742,740
Utah	1	82,332	5	110,065	192,397	3	141,631
Vermont	2	40,815	8	45,457	86,272	..	..
Virginia	10	324,466	21	331,009	655,475	11	436,967
Washington	6	268,050	21	583,685	851,735	9	729,793
West Virginia	10	212,714	22	244,889	457,603	11	367,703
Wisconsin	2	165,314	39	754,904	920,218	7	751,110
Wyoming	5	25,248	4	28,349	53,597	3	24,730
Total U. S.	334	20,545,908	1,429	30,381,597	50,927,505	497	43,665,364

News Services—(cont.)

National News Service, 250 South Broad St., Philadelphia 2, Pa.

NEA (Newspaper Enterprise Assn.) Service, Inc., 461 Eighth Ave., New York 1, N. Y.

News Story Worldwide, Inc., 11 West 42nd St., New York 18, N. Y.

North American Newspaper Alliance, Inc., 400 West Madison St., Chicago 6, Ill.

Transradio Press Service, Inc., 521 Fifth Ave., New York 17, N. Y.

United Press Assns., 220 East 42nd St., New York 17, N. Y.

Universal Press Assns., 11 Scott St., Chicago 10, Ill.

Universal Trade Press Syndicate, 724 Fifth Ave., New York 19, N. Y.

Fifty Leading Magazines of the United States

Source: A.B.C. Publisher's Statements for period ending June 30, 1948.

Magazine	Circulation*	Magazine	Circulation*
Reader's Digest	(†)	Country Gentleman	2,348,213
Life	5,446,089	True Story	2,307,763
Fawcett Comics Group	4,754,217	Lev Gleason Comic Group	2,277,579
Ladies Home Journal	4,522,474	Thrilling Fiction Group	2,144,184
Marvel Comic Group	4,440,993	Cosmopolitan	2,077,002
National Comics—Red	4,233,813	Household	2,051,528
National Comics—Blue	4,203,690	Redbook	1,850,027
Saturday Evening Post	3,923,606	True Confessions	1,814,891
Harvey Comics Group	3,911,218	National Geographic	1,767,792
Archie Comic Group	3,819,950	Time	1,668,530
Woman's Home Companion	3,754,996	Liberty	1,540,192
McCalls	3,700,167	Cappers Farmer	1,312,402
Better Homes & Gardens	3,253,208	Successful Farming	1,252,644
Woman's Day	3,167,209	American Comics Group	1,216,172
American Legion	3,031,386	True	1,202,940
Good Housekeeping	3,012,273	Foreign Service	1,176,538
Look	2,912,689	Premium Group of Comics	1,166,731
Collier's	2,899,175	Hillman Comic Group	1,152,286
Farm Journal	2,674,483	Parents	1,151,305
American Home	2,580,045	Photoplay	1,132,834
Coronet	2,574,705	Modern Romances	1,081,181
Popular Fiction Group	2,568,002	Southern Agriculturist	1,058,011
Quality Comic Group	2,509,712	Pathfinder	1,057,316
Thrilling Comics Group	2,465,575	Popular Mechanics	1,044,885
American	2,425,283	Popular Science	1,043,803

*Average net paid. †The publisher's figure is over 8,000,000; since the magazine does not take advertising, A.B.C. does not publish figures.

Radio Stations and Networks in the United States and Canada

Source: National Association of Broadcasters.

Major networks	No. of stations, Aug. 1, 1948	
	Owned and operated	Affiliated
ABC—American Broadcasting Company ..	5	249
CBS—Columbia Broadcasting System.....	7	161
MBS—Mutual Broadcasting System	0	503
NBC—National Broadcasting Company*..	6	159

*Although NBC discontinued short-wave broadcasting Oct. 1, 1948, they still maintain 175 Latin-American affiliated stations.

No. of stations* (Aug. 1, 1948)			
	Operating	Permits for construction	Total
Standard Broadcast	1,723	315	2,038
Television	28†	91	119
FM (Frequency Modulation)	584‡	427§	1,011

*Including territories and possessions. †Includes 7 licensed and 23 CP's operating on special temporary authority. ‡Includes 22 CG's and 397 CP's operating on special temporary authority. §Includes 81 conditional grants of authority.

CANADA: There are 113 standard broadcast stations; eleven are owned and operated by the Canadian Broadcasting Corporation (CBC); 102 are privately owned and, in some cases, affiliated with CBC.

U. S. POSTAL REGULATIONS

(effective January 1, 1949)

First Class (limit 70 lb.):

Letters and written and sealed matter: 3¢ for each oz., local and nonlocal, except that drop letters are subject to 1¢ for each oz. when deposited for local delivery at offices not having letter-carrier service, provided they are not collected or delivered by rural or star-route carriers.

Government postal cards: 1¢.

Private mailing or post cards: 1¢.

Air Mail (limit 8 oz.):

6¢ for each oz. or fraction thereof within the continental U. S., within any Territory or possession of the U. S., within any geographical area which is a protectorate of the U. S., or between any of the foregoing. This includes air mail to or from Alaska, Hawaii, Puerto Rico, Virgin Islands of the U. S., Canton Island, Canal Zone, Guam and any other place where the U. S. mail service is in operation.

Air Parcel Post (over 8 oz. to 70 lb.):

The zone rates prescribed for parcels carried by air (including other transportation to and from air-mail routes) shall apply to mailable matter of any class weighing over 8 oz. but not more than 70 lb. nor exceeding 100 in. in length and girth combined, including written and other matter of the first class, whether sealed or unsealed, except that in the case of mail of the first class the rate shall not be less than 3¢ an oz. or fraction thereof.

The rate of 6¢ an oz. or fraction thereof will apply (until otherwise instructed) to all domestic air mail weighing up to and including 8 oz., regardless of distance or zone; the zone rates prescribed by Public Law 819, will apply to such mail weighing over 8 oz., fractions of a lb. being charged as a full lb. (provided that on air mail of the first class the rate shall not be less than 3¢ an oz. or fraction thereof).

Air Parcel-Post Zone Rates

Zone and (miles)	First lb.	Addl. lbs.
First & Second (to 150)	55¢	4¢
Third (150-300)	60¢	8¢
Fourth (300-600)	65¢	14¢
Fifth (600-1,000)	70¢	24¢
Sixth (1,000-1,400)	75¢	33¢
Seventh (1,400-1,800)	75¢	45¢
Eighth (over 1,800)	80¢	65¢

Exceptions

The rate of 80¢ for first lb. (over 8 oz. to 1 lb.) and 80¢ for each additional lb. or fraction thereof shall be charged on parcels transported by air as follows:

(a) Between any point in continental U. S. and any point in its Territories and possessions falling in the eighth delivery zone, namely, Hawaii, Alaska, Guam, etc.

(b) Between or within Territories and possessions of the U. S. where the eighth zone is applicable.

(c) Between continental U. S. or its Territories and possessions and the Canal Zone.

(d) Between U. S. or its Territories and possessions and overseas A.P.O.'s and Fleet Post Offices.

(e) Between U. S. or its Territories and possessions and U. S. naval vessels stationed in foreign waters if foreign port is used as part of address.

Second Class (no limit of weight):

Newspapers, magazines and other periodicals containing notice of second-class entry: 1¢ for each 2 oz. or fraction thereof, or the fourth-class rate, whichever is cheaper.

Fourth Class (Parcel Post) (over 8 oz. to 70 lb.):

Merchandise, books, printed matter and all other mailable matter not in first or second class.

Limit of size: 100 in. length and girth combined.

Parcel-Post Zone Rates

Zone and (miles)	1st lb.	2-10 lb.,*	11-70 lb.,†
		per lb.	per lb.
Local	\$.10	\$.01	\$.0075
First & Second (to 150) .....	.12	.021	.02
Third (150-300) .....	.13	.03	.028
Fourth (300-600) .....	.14	.045	.0425
Fifth (600-1,000) .....	.15	.06	.055
Sixth (1,000-1,400) .....	.16	.075	.0725
Seventh (1,400-1,800) ..	.17	.095	.0925
Eighth (over 1,800) ....	.18	.115	.1125

*Figure the first lb. from the first column, the remainder of lbs. from this column. †Figure the first lb. from the first column, the next 9 lb. from the second, and the remainder of lbs. from this column.

Third Class (limit 8 oz.):

PIECE RATE:

Circulars and merchandise, except seeds, plants, etc.: 2¢ for first 2 oz., 1¢ each additional oz.

Books and catalogues of 24 pages or more, seeds, plants, etc.: 1½¢ for each 2 oz.

Minimum third-class charge for pieces of odd size or form: 3¢.

Third Class—BULK RATE:

Circulars and merchandise (not less than 20 lb. or 200 pieces): 14¢ per pound, minimum of 1¢ each.

Books and catalogues of 24 pages or more, seeds, plants, etc. (20 lb. or 200 pieces): 10¢ per lb., minimum of 1¢ each.

Annual fee for mailings of third-class matter at bulk rate: \$10 per calendar year.

NOTE: For conditions and restrictions governing mail to armed forces overseas, consult postmaster.

Books (limit 70 lb.):

Books (containing no advertising matter other than incidental announcements of books) for all zones: 8¢ first lb., 4¢ each additional lb.

Library Books (limit 70 lb.):

Books sent by authorized libraries to readers and when returned by such readers, for delivery within the first three zones or the state in which mailed: 4¢ first lb., 1¢ each additional lb.

Special Delivery and Special Handling:

The prepayment of the special-delivery fee entitles mail to the most expeditious handling and transportation possible, and also entitles it to special delivery at the office of address.

Prepayment of the special-handling fee entitles fourth-class matter to the most expeditious handling, transportation and delivery possible, but not special delivery at the office of address.

Fees for Special Delivery and Special Handling

Weight	Special delivery		Special handling (4th class only)
	First class	2nd, 3rd, 4th class	
Up to 2 lb.	15¢	25¢	15¢
2 to 10 lb.	25¢	35¢	20¢
Over 10 lb.	35¢	45¢	25¢

Money Orders and Postal Notes:

Money orders for amounts from 1¢ to \$100 are issued upon written application made by the remitter or his agent showing the amount of the order and the names and complete addresses of the payee and remitter. Fees are as follows:

Amount of order	Fee
\$.01 to \$ 5.00	10¢
5.01 to 10.00	15¢
10.01 to 50.00	25¢
50.01 to 100.00	35¢

Postal notes for amounts from 1¢ to \$10 are issued without written application for a fee of 8¢ each.

Registered Mail:

Fees for domestic registered mail (first-, second- and third-class matter, and sealed fourth-class matter on which postage at the first-class rate has been paid):

Indemnity limit		Fee
\$.01 to \$ 5.00 .....		.25
5.01 to 25.00 .....		.35
25.01 to 50.00 .....		.40
50.01 to 75.00 .....		.45
75.01 to 100.00 .....		.50
100.01 to 200.00 .....		.60
200.01 to 300.00 .....		.70
300.01 to 400.00 .....		.85
400.01 to 500.00		1.00
500.01 to 600.00		1.10
600.01 to 700.00		1.20
700.01 to 800.00		1.30
800.01 to 900.00		1.40
900.01 to 1000.00		1.50

For registered mail having a declared value in excess of the maximum indemnity covered by the registry fee paid there shall be charged additional fees (surcharges) as follows:

When declared value exceeds maximum indemnity covered by registry fee paid—	Fee
By not over \$50	2¢
By over \$50 but not over \$100	3¢
By over \$100 but not over \$200	4¢
By over \$200 but not over \$400	6¢
By over \$400 but not over \$600	7¢
By over \$600 but not over \$800	8¢
By over \$800 but not over \$1000	10¢

If the excess of the declared value over the maximum indemnity covered by the registry fee paid is \$1,000 or more, the additional fees for each \$1,000 or part of \$1,000 on articles destined to points within the several zones applicable to fourth-class matter shall be as follows:

Zone	Fee
For local delivery, or for delivery within 1st zone	11¢
For delivery within 2nd zone	12¢
For delivery within 3rd zone	14¢
For delivery within 4th zone	15¢
For delivery within 5th or 6th zones	16¢
For delivery within 7th or 8th zones	18¢

In the case of nonnegotiable securities, surcharge is based on known or estimated cost of duplication.

Registration fee for mail without intrinsic value for which no indemnity is paid: 20¢.

Insured Mail:

Fee for insured mail (savings bonds, stubs, etc.) treated as registered mail under special authorization by the Department: 20¢.

Fees for domestic insured mail (third- and fourth-class matter):

Indemnity limit	Fee
\$.01 to \$ 5.00	5¢
5.01 to 10.00	10¢
10.01 to 25.00	15¢
25.01 to 50.00	20¢
50.01 to 100.00	25¢
100.01 to 200.00	30¢

C.O.D. Mail:

Fees for domestic unregistered C.O.D. mail (third- and fourth-class matter and sealed domestic mail matter of any class bearing postage at the first-class rate):

Indemnity limit	Fee
\$.01 to \$ 2.50	20¢
2.51 to 5.00	25¢
5.01 to 25.00	35¢
25.01 to 50.00	45¢
50.01 to 100.00	55¢
100.01 to 150.00	60¢
150.01 to 200.00	65¢

Fees for domestic registered C.O.D. mail (sealed domestic mail of any class bearing postage at the first-class rate):

Amount collectible and indemnity payable	Fee
\$.01 to \$ 10.00	\$.55
10.01 to 50.00 .....	.70
50.01 to 100.00 .....	.90
100.01 to 200.00*	1.15

*Limit of collections.

When indemnity in excess of \$200 is desired, the fees for domestic registered C.O.D. mail are:

Indemnity limit	Fee
\$200.01 to \$ 300.00	\$1.20
300.01 to 400.00	1.25
400.01 to 500.00	1.30
500.01 to 600.00	1.35
600.01 to 700.00	1.40
700.01 to 800.00	1.45
800.01 to 1000.00	1.55

Miscellaneous:

Fees for senders' return receipts for domestic registered and insured mail: when requested at time of mailing, 5¢; when requested after time of mailing, 10¢; when requested showing to whom, when, and the address where the article was delivered, 31¢.

Fee for effecting delivery of domestic registered, insured, and C.O.D. mail to addressee only or to addressee or order: 20¢.

Fee for notifying sender or his representative of inability to deliver a C. O. D. article: 5¢.

A demurrage charge of 5¢ a day is collected on each C.O.D. article which the addressee fails to accept within 20 days after the first attempt to deliver or the first notice of arrival at the office of address is given.

Certificates of mailing for ordinary mail of any class and additional certificates for ordinary, registered, insured and C.O.D. mail: 1¢ for each article described thereon.

The sending of registered or insured mail to Army and Navy personnel overseas is restricted. Consult postmaster for details. C.O.D. mail cannot be sent to Navy personnel on board ships or at overseas shore stations.

Foreign Regular Mail:

South and Central America (except European possessions), Canada, Newfoundland, Labrador, Cuba, Dominican Republic, Haiti, Andorra, Spain and Philippines: letters, 3¢ an oz. or fraction thereof; post cards, 2¢ single, 4¢ reply-paid.

Other countries: letters, 5¢ first oz., 3¢ each additional oz. or fraction thereof; post cards, 3¢ single, 6¢ reply-paid.

Foreign Air Mail:

Articles for transmission by air to any foreign country should have affixed the blue "Par Avion/By Air Mail" label (Form 2978). That label, however, is not to be affixed to articles intended for transmission by air within the U. S. only.

The Postmaster General's staff was established Jan. 22, 1946, by an order of the Postmaster General. It is the coordinating body of the Post Office Department, insuring uniformity of policy among the several bureaus and offices of the Department.

Members are: The First, Second, Third, and Fourth Assistant Postmasters General, the Executive Assistant to the Postmaster General, the Chief Inspector, and the Chief Clerk and Director of Personnel. The First Assistant Postmaster General is chairman.

The highest price ever paid for a single postage stamp was reputed to have been more than \$45,000. It was a 1-cent British Guiana issue from the Arthur Hind collection sold at auction during 1933-34.

Air-Mail Rates per Half Ounce in Cents from U. S. to:

Aden	25	Ecuador	10	Lithuanian S.S.R.	15	St. Eustatius	10
Afghanistan	25	Egypt	15	Luxemburg	15	St. Helena	25
Albania	15	Eire	15	Macao	25	St. Kitts	10
Algeria	15	El Salvador	10	Madagascar	25	St. Lucia	10
Andorra	15	England	15	Madeira	15	St. Martin	10
Anglo-Egyptian Sudan	25	Eritrea	25	Malayan Union	25	St. Pierre & Miquelon	10
Angola	25	Estonian S.S.R.	15	Malta	15	(per oz.)	07
Anguilla	10	Ethiopia	25	Manchuria	25	St. Vincent	10
Antigua	10	Faeroe Is.	15	Martinique	10	Salvador, El.	10
Argentina	10	Falkland Is.	10	Mauritania	25	Samoa, Western	25
Aruba	10	Fiji Is.	25	Mauritius	25	San Marino	15
Ascension Is.	15	Finland	15	Mexico (per oz.)	06	Santa Cruz Is.	25
Australia	25	France	15	Monaco	15	Sarawak	25
Austria	15	Fr. Eq. Africa	25	Montserrat	15	Saudi Arabia	25
Azores	15	Fr. Guinea	10	Morocco (all zones)	15	Scotland	15
Bahamas	10	Fr. Pacific Settlements	25	Mozambique	25	Senegal	25
Bahrain Is.	25	Fr. Settlements in India	25	Nauru Is.	25	Seychelles	25
Baluchistan	25	Fr. Somaliland	25	Netherlands	15	Siam	25
Barbados	10	Fr. Sudan	25	Netherlands Indies	25	Sierra Leone	25
Barbuda	10	Gambia	25	Nevis	10	Singapore	25
Bechuanaland	25	Germany	15	New Caledonia	25	Solomon Is.	25
Belgian Congo	25	Gibraltar	15	New Guinea	25	Somalia	25
Belgium	15	Gilbert & Ellice Is.	25	New Hebrides	25	South West Africa	25
Bermudas	10	Gold Coast	25	New Zealand	25	Southern Rhodesia	25
Bolivia	10	Great Britain	15	Newfoundland	10	Spain	15
Bonaire	10	Greece	15	Nicaragua	10	Sp. Guinea	25
Brazil	10	Grenada	10	Niger	25	Surinam	10
Br. Cameroons	25	Grenadines	10	Nigeria	25	Sweden	15
Br. Guiana	10	Guadeloupe	10	North Borneo, State of	25	Switzerland	15
Br. Honduras	10	Guatemala	10	Northern Ireland	15	Syria	25
Br. Somaliland	25	Haiti	10	Northern Rhodesia	25	Taiwan (Formosa)	25
Brunei	25	Honduras	10	Norway	15	Tanganyika Terr.	25
Bulgaria	15	Hong Kong	25	Nyasaland	25	Tibet	25
Burma	25	Hungary	15	Okinawa	25	Togo (Fr.)	25
Cameroon	25	Iceland	15	Pakistan	25	Tonga Is.	25
Canada (per oz.)	06	India	25	Palestine	25	Trans-Jordan	25
Canary Is.	25	Indo-Chinese Union	25	Panama	10	Trieste	15
Cape Verde Is.	25	Iran	25	Papua	25	Trinidad	10
Ceylon	25	Iraq	25	Paraguay	10	Tripolitania	15
Chile	10	Israel	25	Perna	25	Tristan da Cunha	25
China	25	It. Somaliland	25	Peru	10	Tunisia	15
Colombia	10	Italy	15	Philippines	25	Turkey	15
Cook Is.	25	Ivory Coast	25	Poland	15	Turks Is.	10
Corsica	15	Jamaica	10	Portugal	15	Uganda	25
Costa Rica	10	Japan	25	Port. E. Africa	25	U. of So. Africa	25
Cuba	08	Kenya	25	Port. Guinea	25	U.S.S.R.	15
Curacao	10	Korea	25	Port. India	25	Uruguay	10
Cyprus	25	Labrador	10	Port. Timor	25	Vatican City State	15
Cyrenaica	15	Labuan	25	Port. W. Africa	25	Venezuela	10
Czechoslovakia	15	Latvian S.S.R.	15	Redonda	25	Virgin Is. (Br.)	10
Dahomey	25	Lebanon	15	Reunion	25	Wales	15
Denmark	15	Leeward Is.	10	Rio de Oro	25	Windward Is.	10
Dodecanese	15	Libya	25	Rumania	15	Yemen	25
Dominica	10	Liechtenstein	15	Ryukyu Is.	25	Yugoslavia	15
Dominican Rep.	10			Saba	10	Zanzibar	25

The U. S. Postal System

Source: U. S. Government Manual.

While the original purpose of the Postal System was to provide "the best means of establishing posts for conveying letters and intelligence through this continent" (Journals of the Continental Congress, May 27, 1775), the Post Office Department was ultimately enlarged to include other services. Among the most important were: postage stamps (1847), registered mail (1855), railway mail service (1862), city delivery service (1863), postal money orders (1864), foreign money orders (1867), special delivery (1885), rural delivery (1896), postal savings (1911), village delivery (1912), parcel post, including insurance and collect-on-delivery service (1913), and air mail (1918).

Benjamin Franklin, who was appointed postmaster at Philadelphia in 1737 and Co-Deputy Postmaster General of the British Colonies in North America in 1753, and who on July 26, 1775, became the first

Postmaster General under the Continental Congress, is credited with having laid much of the foundation for the development of the present Postal System.

The Constitution of the U. S., Article I, section 8, provided that "The Congress shall have Power . . . To establish Post Offices and post Roads."

Samuel Osgood was the first Postmaster General under the Constitution, having been appointed Sept. 26, 1789, at which time there were 75 post offices. From that small beginning, the Postal Service has been developed into what is now the largest business in the world.

It employs approximately 490,000 workers and has an annual pay roll in excess of \$1 billion. Yearly, the Postal Service handles more than \$17 billion and has gross receipts totaling in excess of \$1 billion. There are approximately 42,000 post offices in the U. S.



ACQUISITION OF
TERRITORY BY THE
UNITED STATES

- ALASKA, 1867
- HAWAIIAN, 1898
- PHILIPPINES, 1898
- GUAM, 1898
- AM. SAMOA, 1900



PUERTO RICO, 1898
VIRGIN IS., 1917

History of the Flag

Source: Encyclopaedia Britannica.

THE FIRST OFFICIAL AMERICAN flag, the Continental or Grand Union flag, was displayed on Prospect Hill, Jan. 1, 1776, in the American lines besieging Boston. It had thirteen alternate red and white stripes, with the British Union Jack in the upper left corner.

On June 14, 1777, the Continental Congress adopted the design for a new flag, which actually was the Continental flag with the red cross of St. George and the white cross of St. Andrew replaced on the blue field by thirteen stars, one for each state. No rule was made as to the arrangement of the stars, and while they were usually shown in a circle, there were various other designs. It is uncertain when the new flag was first flown, but its first official announcement is believed to have been on Sept. 3, 1777.

The first public assertion that Betsy Ross made the first Stars and Stripes appeared in a paper read before the Historical Society of Pennsylvania on March 14, 1870, by William J. Canby, a grandson. However, Mr. Canby on later investigation found no official documents of any action by Congress on the flag before June 14, 1777. Betsy Ross' own story, according to her daughter, was that Washington, Robert Morris and George Ross, as representatives of Congress, visited her in Philadelphia in June, 1776, showing her a rough draft of the flag and asking her if she could make one. However, the only actual record of the manufacture of flags by Betsy Ross is a voucher in Harrisburg, Pa., for 14 pounds

and some shillings for flags for the Pennsylvania navy.

On Jan. 13, 1794, Congress voted to add two stars and two stripes to the flag in recognition of the admission of Vermont and Kentucky to the Union. By 1818, there were twenty states in the Union, and as it was obvious that the flag would soon become unwieldy, Congress voted April 18 to return to the original thirteen stripes and to indicate the admission of a new state simply by the addition of a star the following July 4. The last two stars were added July 4, 1912, for New Mexico and Arizona.

The first Confederate flag, adopted in 1861 by the Confederate convention in Montgomery, Ala., was called the Stars and Bars; but because of its similarity in colors to the American flag, there was much confusion in the Battle of Bull Run. To remedy this situation, Gen. G. T. Beauregard suggested a battle flag, which was used by the Southern armies throughout the war. The flag consisted of a red field on which was placed a blue cross of St. Andrew separated from the field by a white fillet and adorned with thirteen* white stars for the Confederate states. In May, 1863, at Richmond, an official flag was adopted by the Confederate Congress. This flag was white and twice as long as wide; the union, two-thirds the width of the flag, contained the battle flag designed for Gen. Beauregard. A broad transverse stripe of red was added Feb. 4, 1865, so that the flag might not be mistaken for a signal of truce.

*11 states formally seceded, and unofficial groups in Kentucky and Missouri adopted ordinances of secession. On this basis, these two states were admitted to the Confederacy, although the official state governments remained in the Union.

Flag Etiquette

(Public Law 829—77th Congress)

JOINT RESOLUTION

To amend Public Law Numbered 623, approved June 22, 1942, entitled "Joint resolution to codify and emphasize existing rules and customs pertaining to the display and use of the flag of the United States of America."

Resolved by the Senate and House of Representatives of the United States of America in Congress Assembled, That Public Law Numbered 623, approved June 22, 1942, entitled "Joint resolution to codify and emphasize existing rules and customs pertaining to the display and use of the flag of the United States of America," be, and the same is hereby amended to read as follows:

That the following codification of existing rules and customs pertaining to the display and use of the flag of the United States of America be, and it is hereby, established for the use of such civilians or

civilian groups or organizations as may not be required to conform with regulations promulgated by one or more executive departments of the Government of the United States.

SEC. 2. (a) It is the universal custom to display the flag only from sunrise to sunset on buildings and on stationary flag-staffs in the open. However, the flag may be displayed at night upon special occasions when it is desired to produce a patriotic effect.

(b) The flag should be hoisted briskly and lowered ceremoniously.

(c) The flag should not be displayed on days when the weather is inclement.

(d) The flag should be displayed on all days when the weather permits, especially on New Year's Day, January 1; Inauguration Day, January 20; Lincoln's Birthday, February 12; Washington's Birthday, Feb-

January 22; Army Day, April 6; Easter Sunday (variable); Mother's Day, second Sunday in May; Memorial Day (half-staff until noon), May 30; Flag Day, June 14; Independence Day, July 4; Labor Day, first Monday in September; Constitution Day, September 17; Columbus Day, October 12; Navy Day, October 27; Armistice Day, November 11; Thanksgiving Day, fourth Thursday in November; Christmas Day, December 25; such other days as may be proclaimed by the President of the United States; the birthdays of States (dates of admission); and on State holidays.

(e) The flag should be displayed daily, weather permitting, on or near the main administration building of every public institution.

(f) The flag should be displayed in or near every polling place on election days.

(g) The flag should be displayed during school days in or near every schoolhouse.

SEC. 3. That the flag, when carried in a procession with another flag or flags, should be either on the marching right; that is, the flag's own right, or, if there is a line of other flags, in front of the center of that line.

(a) The flag should not be displayed on a float in a parade except from a staff, or as provided in subsection (i).

(b) The flag should not be draped over the hood, top, sides, or back of a vehicle or of a railroad train or a boat. When the flag is displayed on a motorcar, the staff shall be fixed firmly to the chassis or clamped to the radiator cap.

(c) No other flag or pennant should be placed above or, if on the same level, to the right of the flag of the United States of America, except during church services conducted by naval chaplains at sea, when the church pennant may be flown above the flag during church services for the personnel of the Navy.

(d) The flag of the United States of America, when it is displayed with another flag against a wall from crossed staffs, should be on the right, the flag's own right, and its staff should be in front of the staff of the other flag.

(e) The flag of the United States of America should be at the center and at the highest point of the group when a number of flags of States or localities or pennants of societies are grouped and displayed from staffs.

(f) When flags of States, cities, or localities, or pennants of societies are flown on the same halyard with the flag of the United States, the latter should always be at the peak. When the flags are flown from adjacent staffs, the flag of the United States should be hoisted first and lowered last. No such flag or pennant may be placed above the flag of the United States or to the right of the flag of the United States.

(g) When flags of two or more nations

are displayed, they are to be flown from separate staffs of the same height. The flags should be of approximately equal size. International usage forbids the display of the flag of one nation above that of another nation in time of peace.

(h) When the flag of the United States is displayed from a staff projecting horizontally or at an angle from the window sill, balcony, or front of a building, the union of the flag should be placed at the peak of the staff unless the flag is at half-staff. When the flag is suspended over a sidewalk from a rope extending from a house to a pole at the edge of the sidewalk, the flag should be hoisted out, union first, from the building.

(i) When the flag is displayed otherwise than by being flown from a staff, it should be displayed flat, whether indoors or out, or so suspended that its folds fall as free as though the flag were staffed.

(j) When the flag is displayed over the middle of the street, it should be suspended vertically with the union to the north in an east and west street or to the east in a north and south street.

(k) When used on a speaker's platform, the flag, if displayed flat, should be displayed above and behind the speaker. When displayed from a staff in a church or public auditorium, if it is displayed in the chancel of a church, or on the speaker's platform in a public auditorium, the flag should occupy the position of honor and be placed at the clergyman's or speaker's right as he faces the congregation or audience. Any other flag so displayed in the chancel or on the platform should be placed at the clergyman's or speaker's left as he faces the congregation or audience. But when the flag is displayed from a staff in a church or public auditorium elsewhere than in the chancel or on the platform it shall be placed in the position of honor at the right of the congregation or audience as they face the chancel or platform. Any other flag so displayed should be placed on the left of the congregation or audience as they face the chancel or platform.

(l) The flag should form a distinctive feature of the ceremony of unveiling a statue or monument, but it should never be used as the covering for the statue or monument.

(m) The flag, when flown at half-staff, should be first hoisted to the peak for an instant and then lowered to the half-staff position. The flag should be again raised to the peak before it is lowered for the day. By "half-staff" is meant lowering the flag to one-half the distance between the top and bottom of the staff. Crepe streamers may be affixed to spearheads or flag-staffs in a parade only by order of the President of the United States.

(n) When the flag is used to cover a casket, it should be so placed that the union is at the head and over the left

shoulder. The flag should not be lowered into the grave or allowed to touch the ground.

SEC. 4. That no disrespect should be shown to the flag of the United States of America, the flag should not be dipped to any person or thing. Regimental colors, State flags, and organization or institutional flags are to be dipped as a mark of honor.

(a) The flag should never be displayed with the union down save as a signal of dire distress.

(b) The flag should never touch anything beneath it, such as the ground, the floor, water, or merchandise.

(c) The flag should never be carried flat or horizontally, but always aloft and free.

(d) The flag should never be used as drapery of any sort whatsoever, never festooned, drawn back, nor up, in folds, but always allowed to fall free. Bunting of blue, white, and red, always arranged with the blue above, the white in the middle, and the red below, should be used for covering a speaker's desk, draping the front of a platform, and for decoration in general.

(e) The flag should never be fastened, displayed, used, or stored in such a manner as will permit it to be easily torn, soiled, or damaged in any way.

(f) The flag should never be used as a covering for a ceiling.

(g) The flag should never have placed upon it, nor on any part of it, nor attached to it any mark, insignia, letter, word, figure, design, picture, or drawing of any nature.

(h) The flag should never be used as a receptacle for receiving, holding, carrying, or delivering anything.

(i) The flag should never be used for advertising purposes in any manner whatsoever. It should not be embroidered on such articles as cushions or handkerchiefs and the like, printed or otherwise impressed on paper napkins or boxes or anything that is designed for temporary use and discard; or used as any portion of a costume or athletic uniform. Advertising signs should not be fastened to a staff or halyard from which the flag is flown.

(j) The flag, when it is in such condition that it is no longer a fitting emblem for display, should be destroyed in a dignified way, preferably by burning.

SEC. 5. That during the ceremony of hoisting or lowering the flag or when the flag is passing in a parade or in a review, all persons present should face the flag, stand at attention, and salute. Those present in uniform should render the military salute. When not in uniform, men should remove the headdress with the right hand

holding it at the left shoulder, the hand being over the heart. Men without hats should salute in the same manner. Aliens should stand at attention. Women should salute by placing the right hand over the heart. The salute to the flag in the moving column should be rendered at the moment the flag passes.

SEC. 6. That when the national anthem is played and the flag is not displayed, a present should stand and face toward the music. Those in uniform should salute at the first note of the anthem, retaining this position until the last note. All others should stand at attention, men removing the headdress. When the flag is displayed all present should face the flag and salute.

SEC. 7. That the pledge of allegiance to the flag, "I pledge allegiance to the flag of the United States of America and to the Republic for which it stands, one Nation indivisible, with liberty and justice for all," be rendered by standing with the right hand over the heart. However, civilians will always show full respect to the flag when the pledge is given by merely standing at attention, men removing the headdress. Persons in uniform shall render the military salute.

SEC. 8. Any rule or custom pertaining to the display of the flag of the United States of America, set forth herein, may be altered, modified, or repealed, or additional rules with respect thereto may be prescribed, by the Commander-in-Chief of the Army and Navy of the United States whenever he deems it to be appropriate or desirable; and any such alteration or additional rule shall be set forth in a proclamation.

Approved, December 22, 1942.

The American's Creed*

"I believe in the United States of America as a government of the people, by the people, for the people; whose just powers are derived from the consent of the governed; a democracy in a republic; a sovereign Nation of many sovereign States; perfect union, one and inseparable; established upon those principles of freedom, equality, justice, and humanity for which American patriots sacrificed their lives and fortunes.

"I therefore believe it is my duty to my country to love it; to support its Constitution; to obey its laws; to respect its flag, and to defend it against all enemies.

The Pledge to the Flag†

"I pledge allegiance to the flag of the United States of America, and to the Republic for which it stands, one Nation, indivisible, with liberty and justice for all

*William Tyler Page, Clerk of the United States House of Representatives, wrote "The American's Creed" in 1917. It was accepted by the House of Representatives on behalf of the American people on April 3, 1918.

†Written by Francis Belamy in August, 1892, of the staff of *The Youth's Companion* in Boston, at the suggestion of James B. Upham, one of the editors.

CONSTITUTION of the UNITED STATES OF AMERICA

THE oldest federal constitution in existence was framed by a convention of delegates from twelve of the thirteen original states in Philadelphia in May 1787, Rhode Island failing to send a delegate. George Washington presided over the session, which lasted until September 17, 1787. The draft (originally a preamble and seven Articles) was submitted to all thirteen states and was to become effective when ratified by nine states. It went into effect on the first Wednesday in March 1789, having been ratified by New Hampshire, the ninth state to approve, on June 21, 1788. The states ratified the Constitution in the following order:

Delaware	December 7, 1787	South Carolina	May 23, 1788
Pennsylvania	December 12, 1787	New Hampshire	June 21, 1788
New Jersey	December 18, 1787	Virginia	June 25, 1788
Georgia	January 2, 1788	New York	July 26, 1788
Connecticut	January 9, 1788	North Carolina	November 21, 1789
Massachusetts	February 6, 1788	Rhode Island	May 29, 1790
Maryland	April 28, 1788		

Outline of the Constitution

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SEC. 2. House of Representatives, how and by whom chosen—Qualifications of a Representative—Representatives and direct taxes, how apportioned—Enumeration—Vacancies to be filled—Power of choosing officers, and of impeachment.

SEC. 3. Senators, how and by whom chosen—How classified—State Executive, when to make temporary appointments, in case, etc.—Qualifications of a Senator—President of the Senate, his right to vote—President pro tem., and other officers of the Senate, how chosen—Power to try impeachments—When President is tried, Chief Justice to preside—Sentence.

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SEC. 5. Membership—Quorum—Adjournments—Rules—Power to punish or expel—Journal—Time of adjournments, how limited, etc.

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SEC. 2. President to be commander in chief—He may require opinions of Cabinet Officers, etc., may pardon—Treaty-making power—Nomination of certain officers—When President may fill vacancies.

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XXI. Repeal of Prohibition.

The Constitution of the United States of America

PREAMBLE.—WE THE PEOPLE of the United States, in Order to form a more perfect Union, establish Justice, insure domestic Tranquility, provide for the common defence, promote the general Welfare, and secure the Blessings of Liberty to ourselves and our Posterity, do ordain and establish this Constitution for the United States of America.

ARTICLE I

Section 1

Legislative powers vested in Congress.—All legislative Powers herein granted shall be vested in a Congress of the United States, which shall consist of a Senate and House of Representatives.

Section 2

Composition of the House of Representatives.—1. The House of Representatives shall be composed of Members chosen every second Year by the People of the several States, and the Electors in each State shall have the Qualifications requisite for Electors of the most numerous Branch of the State Legislature.

Qualifications of Representatives.—2. No Person shall be a Representative who shall not have attained to the Age of twenty-five Years, and been seven Years a Citizen

of the United States, and who shall not, when elected, be an Inhabitant of that State in which he shall be chosen.

Apportionment of Representatives and direct taxes—census.*—3. [Representatives and direct Taxes shall be apportioned among the several States which may be included within this Union, according to their respective Numbers, which shall be determined by adding to the whole Number of free Persons, including those bound to Service for a Term of Years, and excluding Indians not taxed, three fifths of all other persons.] The actual Enumeration shall be made within three Years after the first Meeting of the Congress of the United States, and within every subsequent Term of ten Years, in such Manner as they shall by Law direct. The Number of Representatives shall not exceed one for every thirty Thousand, but each State shall have at Least one Representative; and until such enumeration shall be made, the State of New Hampshire shall be entitled to chuse three, Massachusetts eight, Rhode-Island and Providence Plantations one, Connecticut five, New York six, New Jersey four, Pennsylvania eight, Delaware one, Maryland six, Virginia ten, North Carolina five, South Carolina five, and Georgia three.

Filling of vacancies in representation.—

4. When vacancies happen in the Representation from any State, the Executive Au-

*The clause included in brackets is amended by the fourteenth amendment, second section.

thority thereof shall issue Writs of Election to fill such Vacancies.

Selection of officers; power of impeachment.—5. The House of Representatives shall chuse their Speaker and other Officers; and shall have the sole Power of Impeachment.

Section 3*

The Senate.—[1. The Senate of the United States shall be composed of two Senators from each State, chosen by the Legislature thereof, for six Years; and each Senator shall have one Vote.]

Classification of Senators; filling of vacancies.—2. Immediately after they shall be assembled in Consequence of the first Election, they shall be divided as equally as may be into three Classes. The Seats of the Senators of the first Class shall be vacated at the expiration of the second Year, of the second Class at the Expiration of the fourth Year, and of the third Class at the Expiration of the sixth Year, so that one-third may be chosen every second Year; and if Vacancies happen by Resignation, or otherwise, during the Recess of the Legislature of any State, the Executive thereof may make temporary Appointments [until the next Meeting of the Legislature, which shall then fill such Vacancies.]

Qualification of Senators.—3. No Person shall be a Senator who shall not have attained to the Age of thirty Years, and been nine Years a Citizen of the United States, and who shall not, when elected, be an Inhabitant of that State for which he shall be chosen.

Vice-President to be President of Senate.—4. The Vice-President of the United States shall be President of the Senate, but shall have no Vote, unless they be equally divided.

Selection of Senate officers; President pro tempore.—5. The Senate shall chuse their other Officers, and also a President pro tempore, in the absence of the Vice-President, or when he shall exercise the Office of President of the United States.

Senate to try impeachments.—6. The Senate shall have the sole Power to try all Impeachments. When sitting for that Purpose, they shall be on Oath or Affirmation. When the President of the United States is tried, the Chief Justice shall preside: And no Person shall be convicted without the Concurrence of two thirds of the Members present.

Judgment in cases of impeachment.—7. Judgment in Cases of Impeachment shall not extend further than to removal from Office, and disqualification to hold and en-

joy any Office of honor, Trust, or Profit under the United States: but the Party convicted shall nevertheless be liable and subject to Indictment, Trial, Judgment and Punishment, according to Law.

Section 4

Control of congressional elections.—1. The Times, Places and Manner of holding Elections for Senators and Representatives, shall be prescribed in each State by the Legislature thereof; but the Congress may at any time by Law make or alter such Regulations, except as to the Places of chusing Senators.

Time for assembling of Congress.†—2. The Congress shall assemble at least once in every Year, and such Meeting shall be on the first Monday in December, unless they shall by Law appoint a different Day.

Section 5

Each house to be the Judge of the election and qualifications of its members; regulations as to quorum.—1. Each House shall be the Judge of the Elections, Returns and Qualifications of its own Members, and a Majority of each shall constitute a Quorum to do Business; but a smaller Number may adjourn from day to day, and may be authorized to compel the Attendance of absent Members, in such Manner, and under such Penalties as each House may provide.

Each house to determine its own rules.—2. Each House may determine the Rules of its Proceedings, punish its Members for disorderly Behavior, and, with the Concurrence of two thirds, expel a Member.

Journals and yeas and nays.—3. Each House shall keep a Journal of its Proceedings, and from time to time publish the same, excepting such Parts as may in their Judgment require Secrecy; and the Yeas and Nays of the Members of either House on any question shall, at the Desire of one fifth of those Present, be entered on the Journal.

Adjournment.—4. Neither House, during the Session of Congress shall, without the Consent of the other, adjourn for more than three days, nor to any other Place than that in which the two Houses shall be sitting.

Section 6

Compensation and privileges of Members of Congress.—1. The Senators and Representatives shall receive a Compensation for their Services, to be ascertained by Law, and paid out of the Treasury of the United States. They shall in all Cases, except Treason, Felony and Breach of the

*The first paragraph of section three of article I of the Constitution of the United States, and so much of paragraph two of the same section as relates to filling vacancies, are amended by the seventeenth amendment to the Constitution.

†Amended by article XX, section 2, of the amendments to the Constitution.

Peace, be privileged from Arrest during their Attendance at the Session of their respective Houses, and in going to and returning from the same; and for any Speech or Debate in either House, they shall not be questioned in any other Place.

Incompatible offices; exclusions.—2. No Senator or Representative shall, during the Time for which he was elected, be appointed to any civil Office under the Authority of the United States, which shall have been created, or the Emoluments whereof shall have been increased during such time; and no Person holding any Office under the United States, shall be a Member of either House during his Continuance in Office.

Section 7

Revenue bills to originate in House.—1. All Bills for raising Revenue shall originate in the House of Representatives; but the Senate may propose or concur with Amendments as on other Bills.

Manner of passing bills; veto power of President.—2. Every Bill which shall have passed the House of Representatives and the Senate, shall, before it becomes a Law, be presented to the President of the United States; If he approve he shall sign it, but if not he shall return it, with his Objections to that House in which it shall have originated, who shall enter the Objections at large on their Journal, and proceed to reconsider it. If after such Reconsideration two thirds of that House shall agree to pass the Bill, it shall be sent, together with the Objections, to the other House, by which it shall likewise be reconsidered, and if approved by two thirds of that House, it shall become a Law. But in all such Cases the Votes of both Houses shall be determined by Yeas and Nays, and the Names of the Persons voting for and against the Bill shall be entered on the Journal of each House respectively. If any Bill shall not be returned by the President within ten Days (Sundays excepted) after it shall have been presented to him, the Same shall be a Law, in like Manner as if he had signed it, unless the Congress by their Adjournment prevent its Return, in which Case it shall not be a Law.

Concurrent orders or resolutions, to be passed by President.—3. Every Order, Resolution, or Vote to which the Concurrence of the Senate and House of Representatives may be necessary (except on a question of adjournment) shall be presented to the President of the United States; and before the Same shall take Effect, shall be approved by him, or being disapproved by him, shall be repassed by two thirds of the Senate and House of Representatives, according to the Rules and Limitations prescribed in the Case of a Bill.

Section 8

General powers of Congress.*

The Congress shall have Power.—1. To lay and collect Taxes, Duties, Imposts and Excises, to pay the Debts and provide for the common Defence and general Welfare of the United States; but all Duties, Imposts and Excises shall be uniform throughout the United States.

Borrowing of money.—2. To borrow money on the credit of the United States.

Regulation of commerce.—3. To regulate Commerce with foreign Nations, and among the several States, and with the Indian tribes,

Naturalization and bankruptcy.—4. To establish a uniform Rule of Naturalization, and uniform Laws on the subject of Bankruptcies throughout the United States.

Money, weights and measures.—5. To coin Money, regulate the Value thereof, and of foreign Coin, and fix the Standard of Weights and Measures.

Counterfeiting.—6. To provide for the Punishment of counterfeiting the Securities and current Coin of the United States.

Post offices.—7. To establish Post Offices and post Roads.

Patents and copyrights.—8. To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.

Inferior courts.—9. To constitute Tribunals inferior to the supreme Court.

Piracies and felonies.—10. To define and punish Piracies and Felonies committed on the high Seas, and Offenses against the Law of Nations.

War; marque and reprisal.—11. To declare War, grant Letters of Marque and Reprisal, and make Rules concerning Captures on Land and Water.

Armies.—12. To raise and support Armies, but no Appropriation of Money to that Use shall be for a longer Term than two Years.

Navy.—13. To provide and maintain a Navy.

Land and naval forces.—14. To make Rules for the Government and Regulation of the land and naval Forces.

Calling out militia.—15. To provide for calling forth the Militia to execute the Laws of the Union, suppress Insurrections and repel Invasions.

Organizing, arming and disciplining militia.—16. To provide for organizing, arming, and disciplining the Militia, and for governing such Part of them as may be

*By article XVI of the amendments to the Constitution, Congress is given the power to lay and collect taxes on incomes.

employed in the Service of the United States, reserving to the States, respectively, the Appointment of the Officers, and the Authority of training the Militia according to the discipline prescribed by Congress.

Exclusive legislation over District of Columbia.—17. To exercise exclusive Legislation in all Cases whatsoever, over such District (not exceeding ten Miles square) as may, by Cession of particular States, and the acceptance of Congress, become the Seat of the Government of the United States, and to exercise like Authority over all Places purchased by the Consent of the Legislature of the State in which the same shall be, for the Erection of Forts, Magazines, Arsenals, dock-Yards, and other needful Buildings;—and

To enact laws necessary to enforce Constitution.—18. To make all Laws which shall be necessary and proper for carrying into Execution the foregoing Powers, and all other Powers vested by this Constitution in the Government of the United States, or in any Department or Officer hereof.

Section 9

Migration or importation of certain persons not to be prohibited before 1808.—1. The Migration or Importation of such Persons as any of the States now existing shall think proper to admit, shall not be prohibited by the Congress prior to the Year one thousand eight hundred and eight, but no tax or duty may be imposed on such Importation, not exceeding ten dollars for each Person.

Writ of habeas corpus not to be suspended; exception.—2. The privilege of the Writ of Habeas Corpus shall not be suspended, unless when in Cases of Rebellion or Invasion the public Safety may require it.

Bills of attainder and ex post facto laws prohibited.—3. No Bill of Attainder or ex post facto Law shall be passed.

Capitation and other direct taxes.—4. No Capitation, or other direct, Tax shall be laid, unless in Proportion to the Census or Enumeration herein before directed to be taken.*

Exports not to be taxed.—5. No Tax or Duty shall be laid on Articles exported from any State.

No preference to be given to ports of any State; interstate shipping.—6. No Preference shall be given by any Regulation of Commerce or Revenue to the Ports of one State over those of another: nor shall Vessels bound to, or from, one State, be obliged to enter, clear, or pay Duties in another.

Money, how drawn from treasury; financial statements to be published.—7. No Money shall be drawn from the Treasury, but in Consequence of Appropriations made by Law; and a regular Statement and Account of the Receipts and Expenditures of all public Money shall be published from time to time.

Titles of nobility not to be granted; acceptance by government officers of favors from foreign powers.—8. No Title of Nobility shall be granted by the United States; And no Person holding any Office of Profit or Trust under them, shall, without the Consent of the Congress, accept of any present, Emolument, Office, or Title, of any kind whatever, from any King, Prince, or foreign State.

Section 10

Limitations of the powers of the several States.—1. No State shall enter into any Treaty, Alliance, or Confederation; grant Letters of Marque and Reprisal; coin Money; emit Bills of Credit; make any Thing but gold and silver Coin a Tender in Payment of Debts; pass any Bill of Attainder, ex post facto Law, or Law impairing the Obligation of Contracts or grant any Title of Nobility.

State imposts and duties.—2. No State shall, without the Consent of the Congress, lay any Imposts or Duties on Imports or Exports, except what may be absolutely necessary for executing its inspection Laws; and the net Produce of all Duties and Imposts, laid by any State on Imports or Exports, shall be for the Use of the Treasury of the United States; and all such Laws shall be subject to the Revision and Control of the Congress.

Further restrictions on powers of States.—3. No State shall, without the consent of Congress, lay any duty of Tonnage, keep Troops, or Ships of War in time of Peace, enter into any Agreement or Compact with another State, or with a foreign Power, or engage in War, unless actually invaded, or in such imminent Danger as will not admit of delay.

ARTICLE II

Section 1

The President; the executive power.—1. The executive Power shall be vested in a President of the United States of America. He shall hold his Office during the Term of four Years, and, together with the Vice-President, chosen for the same Term, be elected, as follows:

Appointment and qualifications of presidential electors.—2. Each State shall appoint, in such Manner as the Legislature thereof may direct, a Number of Electors,

*See sixteenth amendment.

equal to the whole Number of Senators and Representatives to which the State may be entitled in the Congress: but no Senator or Representative, or Person holding an Office of Trust or Profit under the United States, shall be appointed an Elector.

Original method of electing the President and Vice-President.*—[The Electors shall meet in their respective States, and vote by Ballot for two persons, of whom one at least shall not be an Inhabitant of the same State with themselves. And they shall make a List of all the Persons voted for, and of the Number of Votes for each; which List they shall sign and certify, and transmit sealed to the Seat of the Government of the United States, directed to the President of the Senate. The President of the Senate shall, in the Presence of the Senate and House of Representatives, open all the Certificates, and the Votes shall then be counted. The Person having the greatest Number of Votes shall be the President, if such Number be a Majority of the whole Number of Electors appointed; and if there be more than one who have such Majority, and have an equal Number of Votes, then the House of Representatives shall immediately chuse by Ballot one of them for President; and if no Person have a Majority, then from the five highest on the list the said House shall in like Manner chuse the President. But in chusing the President, the Votes shall be taken by States, the Representation from each State having one Vote; A quorum for this Purpose shall consist of a Member or Members from two-thirds of the States, and a Majority of all the States shall be necessary to a Choice. In every Case, after the Choice of the President, the Person having the greatest Number of Votes of the Electors shall be the Vice-President. But if there should remain two or more who have equal Votes, the Senate should chuse from them by Ballot the Vice-President.]

Congress may determine time of choosing electors and day for casting their votes.—

3. The Congress may determine the Time of chusing the Electors, and the Day on which they shall give their Votes; which Day shall be the same throughout the United States.

Qualifications for the office of President.†

—4. No person except a natural born Citizen, or a Citizen of the United States, at the time of the Adoption of this Constitution, shall be eligible to the Office of President; neither shall any Person be eligible to that Office who shall not have attained to the Age of thirty-five Years, and been fourteen Years a Resident within the United States.

Filling vacancy in the office of President.‡—5. In Case of the Removal of the President from Office, or of his Death, Resignation, or Inability to discharge the Powers and Duties of the said Office, the same shall devolve on the Vice-President, and the Congress may by Law provide for the Case of Removal, Death, Resignation or Inability, both of the President and Vice-President, declaring what Officer shall then act as President, and such Officer shall act accordingly, until the Disability be removed, or a President shall be elected.

Compensation of the President.—6. The President shall, at stated Times, receive for his Services, a Compensation, which shall neither be encreased nor diminished during the Period for which he shall have been elected, and he shall not receive within that Period any other Emolument from the United States, or any of them.

Oath to be taken by the President.—7. Before he enter on the Execution of his Office, he shall take the following Oath or Affirmation:—"I do solemnly swear (or affirm) that I will faithfully execute the Office of President of the United States, and will to the best of my Ability, preserve, protect and defend the Constitution of the United States."

Section 2

The President to be commander-in-chief of army and navy and head of executive departments; may grant reprieves and pardons.—1. The President shall be Commander-in-Chief of the Army and Navy of the United States, and of the Militia of the several States, when called into the actual Service of the United States; he may require the Opinion, in writing, of the principal Officer in each of the executive Departments, upon any subject relating to the Duties of their respective Offices, and he shall have Power to grant Reprieves and Pardons for Offenses against the United States, except in Cases of Impeachment.

President may, with concurrence of Senate, make treaties, appoint ambassadors, etc.; appointment of inferior officers, authority of Congress over.—2. He shall have Power, by and with the Advice and Consent of the Senate, to make Treaties, provided two-thirds of the Senators present concur; and he shall nominate, and by and with the Advice and Consent of the Senate shall appoint Ambassadors, other public Ministers and Consuls, Judges of the supreme Court, and all other Officers of the United States, whose Appointments are not herein otherwise provided for, and which shall be established by Law; but the Congress may by Law vest the Appoint

*This clause has been superseded by the twelfth amendment.

†For qualifications of the Vice President, see article XII of the amendments.

‡Amended by article XX, sections 3, and 4, of the amendments to the Constitution.

ment of such inferior Officers, as they think proper, in the President alone, in the Courts of Law, or in the Heads of Departments.

President may fill vacancies in office during recess of Senate.—3. The President shall have Power to fill up all Vacancies that may happen during the Recess of the Senate, by granting Commissions which shall expire at the End of their next Session.

Section 3

President to give advice to Congress; may convene or adjourn it on certain occasions; to receive ambassadors, etc.; have laws executed and commission all officers.—He shall from time to time give to the Congress Information of the State of the Union, and recommend to their Consideration such Measures as he shall judge necessary and expedient; he may, on extraordinary Occasions, convene both Houses, or either of them, and in Case of Disagreement between them, with Respect to the Time of Adjournment, he may adjourn them to such Time as he shall think proper; he shall receive Ambassadors and other public Ministers; he shall take Care that the Laws be faithfully executed, and shall Commission all the Officers of the United States.

Section 4

All civil officers removable by Impeachment.—1. The President, Vice-President and all civil Officers of the United States, shall be removed from Office on Impeachment for, and Conviction of, Treason, Bribery, or other high Crimes and Misdemeanors.

ARTICLE III

Section 1

Judicial power; how vested; term of office and compensation of judges.—The judicial Power of the United States, shall be vested in one supreme Court, and in such inferior Courts as the Congress may from time to time ordain and establish. The Judges, both of the supreme and inferior Courts, shall hold their Offices during good Behavior, and shall, at stated Times, receive for their Services a Compensation which shall not be diminished during their Continuance in Office.

Section 2

Jurisdiction of Federal courts.*—1. The judicial Power shall extend to all Cases, in Law and Equity, arising under this Constitution, the Laws of the United States, and Treaties made, or which shall be made, under their Authority;—to all Cases affecting Ambassadors, other public Ministers and Consuls;—to all Cases of Admiralty and maritime Jurisdiction;—to Controversies to which the United States shall

be a Party;—to Controversies between two or more States;—between a State and Citizens of another State;—between Citizens of different States;—between Citizens of the same State claiming Lands under Grants of different States, and between a State, or the Citizens thereof, and foreign States, Citizens or Subjects.

Original and appellate jurisdiction of Supreme Court.—2. In all Cases affecting Ambassadors, other public Ministers and Consuls, and those in which a State shall be Party, the supreme Court shall have original Jurisdiction. In all the other Cases before mentioned, the supreme Court shall have appellate Jurisdiction, both as to Law and Fact, with such Exceptions, and under such Regulations as the Congress shall make.

Trial of all crimes, except impeachment, to be by jury.—3. The trial of all Crimes, except in Cases of Impeachment, shall be by Jury; and such Trial shall be held in the State where the said Crimes shall have been committed; but when not committed within any State, the trial shall be at such Place or Places as the Congress may by Law have directed.

Section 3

Treason defined; conviction of.—1. Treason against the United States, shall consist only in levying War against them, or, in adhering to their Enemies, giving them Aid and Comfort. No Person shall be convicted of Treason unless on the Testimony of two Witnesses to the same overt Act, or on Confession in open Court.

Congress to declare punishment for treason; proviso.—2. The Congress shall have power to declare the Punishment of Treason, but no Attainder of Treason shall work Corruption of Blood, or Forfeiture except during the Life of the Person attainted.

ARTICLE IV

Section 1

Each State to give full faith and credit to the public acts and records of other States.—Full Faith and Credit shall be given in each State to the public Acts, Records, and judicial Proceedings of every other State. And the Congress may by general Laws prescribe the Manner in which such Acts, Records and Proceedings shall be proved, and the Effect thereof.

Section 2

Privileges of citizens.—1. The Citizens of each State shall be entitled to all Privileges and Immunities of Citizens in the several States.

Extradition between the several States.—2. A Person charged in any State with Treason, Felony, or other Crime, who shall

*This section is abridged by article XI of the amendments.

flee from Justice, and be found in another State, shall on demand of the executive Authority of the State from which he fled, be delivered up, to be removed to the State having Jurisdiction of the Crime.

Persons held to labor or service in one State, fleeing to another, to be returned.*

—3. No Person held to Service or Labour in one State, under the Laws thereof, escaping into another, shall, in Consequence of any Law or Regulation therein, be discharged from such Service or Labour, but shall be delivered up on Claim of the Party to whom such Service or Labour may be due.

Section 3

New States.—1. New States may be admitted by the Congress into this Union; but no new State shall be formed or erected within the Jurisdiction of any other State; nor any State be formed by the Junction of two or more States, or parts of States, without the Consent of the Legislatures of the States concerned as well as of the Congress.

Regulations concerning territory.—2. The Congress shall have Power to dispose of and make all needful Rules and Regulations respecting the Territory or other Property belonging to the United States; and nothing in this Constitution shall be so construed as to Prejudice any Claims of the United States, or of any particular State.

Section 4

Republican form of government and protection guaranteed the several States.—The United States shall guarantee to every State in this Union a Republican Form of Government, and shall protect each of them against Invasion; and on Application of the Legislature, or of the Executive (when the Legislature cannot be convened) against domestic Violence.

ARTICLE V

Ways in which the Constitution can be amended.—The Congress, whenever two-thirds of both Houses shall deem it necessary, shall propose Amendments to this Constitution, or, on the Application of the Legislatures of two-thirds of the several States, shall call a Convention for proposing Amendments, which, in either Case, shall be valid to all Intents and Purposes, as part of this Constitution, when ratified by the Legislatures of three-fourths of the several States, or by Conventions in three-fourths thereof, as the one or the other Mode of Ratification may be proposed by the Congress; Provided that no Amendment which may be made prior to the Year One thousand eight hundred and eight shall in any Manner affect the first and

fourth Clauses in the Ninth Section of the first Article; and that no State, without its Consent, shall be deprived of its equal Suffrage in the Senate.

ARTICLE VI

Debts contracted under the confederation secured.—1. All Debts contracted and Engagements entered into, before the Adoption of this Constitution, shall be a valid against the United States under this Constitution, as under the Confederation.

Constitution, laws and treaties of the United States to be supreme.—2. This Constitution, and the Laws of the United States shall be made in Pursuance thereof; and all Treaties made, or which shall be made, under the Authority of the United States, shall be the supreme Law of the Land; and the Judges in every State shall be bound thereby, any Thing in the Constitution or Laws of any State to the Contrary notwithstanding.

Who shall take constitutional oath; no religious test as to official qualification.—3. The Senators and Representatives before mentioned, and the Members of the several State Legislatures, and all executive and judicial Officers, both of the United States and of the several States, shall be bound by Oath or Affirmation, to support this Constitution; but no religious Test shall ever be required as a Qualification to any Office or public Trust under the United States.

ARTICLE VII

Constitution to be considered adopted when ratified by nine States.—The Ratification of the Conventions of nine States shall be sufficient for the Establishment of this Constitution between the States so ratifying the Same.

Done in Convention by the Unanimous Consent of the States present the Seventeenth Day of September in the Year of our Lord one thousand seven hundred and Eighty seven and of the Independence of the United States of America the Twelfth. In Witness whereof We have hereunto subscribed our Names.

Go. WASHINGTON

President and Deputy from Virginia

NEW HAMPSHIRE

John Langdon Nicholas Gilman

MASSACHUSETTS

Nathaniel Gorham Rufus King

CONNECTICUT

Wm Saml Johnson Roger Sherman

NEW YORK

Alexander Hamilton

NEW JERSEY

Wm. Livingston Wm. Paterson
David Brearley Jona. Dayton

*See thirteenth amendment.

PENNSYLVANIA

B. Franklin
Robt. Morris
Thos. Fitzsimons
James Wilson

Thomas Mifflin
Geo. Clymer
Jared Ingersoll
Gouv Morris

DELAWARE

Geo. Read
John Dickinson
Jaco: Broom

Gunning Bedford Jun
Richard Bassett

MARYLAND

James McHenry
Danl Carroll

Dan: of St Thos Jenifer

VIRGINIA

John Blair —

James Madison Jr.

NORTH CAROLINA

Wm Blount
Hu Williamson

Richd Dobbs Spaight,

SOUTH CAROLINA

J. Rutledge
Charles Pinckney

Charles Cotesworth Pinckney.
Pierce Butler

GEORGIA

William Few

Abr Baldwin

Attest: William Jackson, Secretary.

AMENDMENTS TO THE CONSTITUTION OF THE UNITED STATES

[The following amendments from Articles I to X inclusive were proposed at the first session of the first Congress which convened in New York City on March 4, 1789, and were adopted as follows: New Jersey, Nov. 20, 1789; Maryland, Dec. 19, 1789; North Carolina, Dec. 22, 1789; South Carolina, Jan. 19, 1790; New Hampshire, Jan. 25, 1790; Delaware, Jan. 28, 1790; Pennsylvania, March 10, 1790; New York, March 27, 1790; Rhode Island, June 15, 1790; Vermont, Nov. 3, 1791; and Virginia, Dec. 15, 1791.]

ARTICLE I

Freedom of religion, speech, of the press, and right of petition.—Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances.

ARTICLE II

Right of people to bear arms not to be infringed.—A well regulated Militia, being necessary to the security of a free State, the right of the people to keep and bear Arms, shall not be infringed.

ARTICLE III

Quartering of troops.—No Soldier shall, in time of peace be quartered in any house, without the consent of the Owner, nor in time of war, but in a manner to be prescribed by law.

ARTICLE IV

Persons and houses to be secure from unreasonable searches and seizures.—The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.

ARTICLE V

Trials for crimes; just compensation for private property taken for public use.—No person shall be held to answer for a capi-

tal, or otherwise infamous crime, unless on a presentment or indictment of a Grand Jury, except in cases arising in the land or naval forces, or in the Militia, when in actual service in time of War or public danger; nor shall any person be subject for the same offence to be twice put in jeopardy of life or limb; nor shall be compelled in any criminal case to be a witness against himself, nor be deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation.

ARTICLE VI

Civil rights in trials for crimes enumerated.—In all criminal prosecutions, the accused shall enjoy the right to a speedy and public trial, by an impartial jury of the State and district wherein the crime shall have been committed, which district shall have been previously ascertained by law, and to be informed of the nature and cause of the accusation; to be confronted with the witnesses against him; to have compulsory process for obtaining witnesses in his favor, and to have the Assistance of Counsel for his defence.

ARTICLE VII

Civil rights in civil suits.—In suits at common law, where the value in controversy shall exceed twenty dollars, the right of trial by jury shall be preserved, and no fact tried by a jury, shall be otherwise re-examined in any Court of the United States, than according to the rules of the common law.

ARTICLE VIII

Excessive bail, fines and punishments prohibited.—Excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted.

ARTICLE IX

Reserved rights of people.—The enumeration in the Constitution, of certain rights, shall not be construed to deny or disparage others retained by the people.

ARTICLE X

Powers not delegated, reserved to states and people respectively.—The powers not

delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people.

[The Eleventh Amendment was proposed to the several states by the Third Congress on March 5, 1794, and declared effective January 8, 1798.]

ARTICLE XI

Judicial power of United States not to extend to suits against a State.—The Judicial power of the United States shall not be construed to extend to any suit in law or equity, commenced or prosecuted against one of the United States by Citizens of another State, or by Citizens or Subjects of any Foreign State.

[The Twelfth Amendment was submitted to the legislatures of the states by the Eighth Congress on December 12, 1803, and became part of the Constitution September 25, 1804.]

ARTICLE XII

Present mode of electing President and Vice-President by electors.*—The Electors shall meet in their respective states and vote by ballot for President and Vice-President, one of whom, at least, shall not be an inhabitant of the same state with themselves; they shall name in their ballots the person voted for as President, and in distinct ballots the person voted for as Vice-President, and they shall make distinct lists of all persons voted for as President, and of all persons voted for as Vice-President, and of the number of votes for each, which lists they shall sign and certify, and transmit sealed to the seat of the government of the United States, directed to the President of the Senate;—The President of the Senate shall, in the presence of the Senate and House of Representatives, open all the certificates and the votes shall then be counted;—The person having the greatest number of votes for President, shall be the President, if such number be a majority of the whole number of electors appointed; and if no person have such majority, then from the persons having the highest numbers not exceeding three on the list of those voted for as President, the House of Representatives shall choose immediately, by ballot, the President. But in choosing the President, the votes shall be taken by states, the representation from each State having one vote; a quorum for this purpose shall consist of a member or members from two-thirds of the states, and a majority of all the states shall be necessary to a choice. And if the House of Representatives shall not choose a President whenever the right of choice shall devolve upon them, before the fourth day of

March next following, then the Vice-President shall act as President, as in the case of the death or other constitutional disability of the President. The person having the greatest number of votes as Vice-President, shall be the Vice-President, if such number be a majority of the whole number of electors appointed, and if no person have a majority, then from the two highest numbers on the list, the Senate shall choose the Vice-President; a quorum for the purpose shall consist of two-thirds of the whole number of Senators, and a majority of the whole number shall be necessary to a choice. But no person constitutionally ineligible to the office of President shall be eligible to that of Vice-President of the United States.

[The Thirteenth Amendment was offered to the several states by the Thirty-eighth Congress on February 1, 1865, and declared in force December 18, 1865.]

ARTICLE XIII

Section 1

Slavery prohibited.—Neither slavery nor involuntary servitude, except as a punishment for crime whereof the party shall have been duly convicted, shall exist within the United States, or any place subject to their jurisdiction.

Section 2

Congress given power to enforce this article.—Congress shall have power to enforce this article by appropriate legislation.

[The Fourteenth Amendment was proposed to the legislature by the Thirty-ninth Congress on June 16, 1866 and was approved July 28, 1868.]

ARTICLE XIV

Section 1

Citizenship defined; privileges of citizens.—All persons born or naturalized in the United States, and subject to the jurisdiction thereof, are citizens of the United States and of the State wherein they reside. No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws.

Section 2

Apportionment of Representatives.—Representatives shall be apportioned among the several States according to their respective numbers, counting the whole number of persons in each State, excluding

*Amended by article XX, sections 3 and 4, of the amendments to the Constitution.

Indians not taxed. But when the right to vote at any election for the choice of electors for President and Vice-President of the United States, Representatives in Congress, the Executive and Judicial officers of a State, or the members of the Legislature thereof, is denied to any of the male inhabitants of such State, being twenty-one years of age, and citizens of the United States, or in any way abridged, except for participation in rebellion, or other crime, the basis of representation therein shall be reduced in the proportion which the number of such male citizens shall bear to the whole number of male citizens twenty-one years of age in such State.

Section 3

Disqualification for office; removal of disability.—No person shall be a Senator or Representative in Congress, or elector of President and Vice-President, or hold any office, civil or military, under the United States, or under any State, who, having previously taken an oath, as a member of Congress, or as an officer of the United States, or as a member of any State legislature, or as an executive or judicial officer of any State, to support the Constitution of the United States, shall have engaged in insurrection or rebellion against the same, or given aid or comfort to the enemies thereof. But Congress may by a vote of two-thirds of each House, remove such disability.

Section 4

Public debt not to be questioned; payment of debts and claims incurred in aid of rebellion forbidden.—The validity of the public debt of the United States, authorized by law, including debts incurred for payment of pensions and bounties for services in suppressing insurrection or rebellion, shall not be questioned. But neither the United States nor any State shall assume or pay any debt or obligation incurred in aid of insurrection or rebellion against the United States, or any claim for the loss or emancipation of any slave; but all such debts, obligations and claims shall be held illegal and void.

Section 5

Congress given power to enforce this article.—The Congress shall have power to enforce, by appropriate legislation, the provisions of this article.

[The Fifteenth Amendment was submitted to the State Legislatures by the Fortieth Congress on February 27, 1869, and declared in force March 30, 1870.]

ARTICLE XV

Section 1

Right of certain citizens to vote established.—The right of citizens of the United

States to vote shall not be denied or abridged by the United States or by any State, on account of race, color, or previous condition of servitude.

Section 2

Congress given power to enforce this article.—The Congress shall have power to enforce this article by appropriate legislation.

[The Sixteenth Amendment was proposed to the States by the Sixty-first Congress on July 12, 1909, and became effective February 25, 1913.]

ARTICLE XVI

Taxes on income; Congress given power to lay and collect.—The Congress shall have power to lay and collect taxes on incomes, from whatever source derived, without apportionment among the several States, and without regard to any census or enumeration.

[The Sixty-second Congress proposed the Seventeenth Amendment on May 16, 1912, and it became a part of the Constitution on May 31, 1913.]

ARTICLE XVII

Election of United States Senators; filling of vacancies; qualifications of electors.

1. The Senate of the United States shall be composed of two Senators from each State, elected by the people thereof, for six years; and each Senator shall have one vote. The electors in each State shall have the qualifications requisite for electors of the most numerous branch of the State legislatures.

2. When vacancies happen in the representation of any State in the Senate, the executive authority of such State shall issue writs of election to fill such vacancies: Provided, that the legislature of any State may empower the executive thereof to make temporary appointment until the people fill the vacancies by election as the legislature may direct.

3. This amendment shall not be so construed as to affect the election or term of any Senator chosen before it becomes valid as part of the Constitution.

[The Eighteenth or Dry Law Amendment was submitted to the legislatures of the several states by the Sixty-fifth Congress and on January 29, 1919, it was announced the amendment would be in full force on January 16, 1920.]

ARTICLE XVIII*

Manufacture, sale or transportation of intoxicating liquors, for beverage purposes, prohibited.—1. After one year from the ratification of this article the manufacture, sale, or transportation of intoxicating liquors within, the importation thereof

*Repealed by article XXI, effective December 5, 1933.

into, or the exportation thereof from the United States and all territory subject to the jurisdiction thereof for beverage purposes is hereby prohibited.

Congress and the several States given concurrent power to pass appropriate legislation to enforce this article.—2. The Congress and the several States shall have concurrent power to enforce this article by appropriate legislation.

Provisions of article to become operative, when adopted by three-fourths of the States.—3. This article shall be inoperative unless it shall have been ratified as an amendment to the Constitution by the legislatures of the several States, as provided in the Constitution, within seven years from the date of the submission hereof to the States by the Congress.

[The Nineteenth or Equal Suffrage Amendment was proposed to the states by the Sixty-sixth Congress on June 4, 1919, and ratified on August 26, 1920.]

ARTICLE XIX

The right of citizens to vote shall not be denied because of sex.—The right of citizens of the United States to vote shall not be denied or abridged by the United States or by any State on account of sex.

Congress shall have power to enforce this article by appropriate legislation.

[The Twentieth or "Lame Duck" Amendment was proposed to the legislatures by the Seventy-second Congress on March 3, 1932, and was proclaimed in effect Feb. 6, 1933, 39 states having by then ratified it. Sections 1 and 2 became effective October 15, 1933.]

ARTICLE XX

Section 1

Terms of President, Vice-President, Senators and Representatives.—The terms of the President and Vice-President shall end at noon on the 20th day of January, and the terms of Senators and Representatives at noon on the 3d day of January, of the years in which such terms would have ended if this article had not been ratified; and the terms of their successors shall then begin.

Section 2

Time of assembling Congress.—The Congress shall assemble at least once in every year, and such meeting shall begin at noon on the 3d day of January, unless they shall by law appoint a different day.

Section 3

Filling vacancy in office of President.—If, at the time fixed for the beginning of the term of the President, the President elect shall have died, the Vice-President elect shall become President. If a President shall not have been chosen before

the time fixed for the beginning of his term, or if the President elect shall have failed to qualify, then the Vice-President elect shall act as President until a President shall have qualified; and the Congress may by law provide for the case wherein neither a President elect nor a Vice-President elect shall have qualified, declaring who shall then act as President, or the manner in which one who is to act shall be selected, and such person shall act accordingly until a President or Vice-President shall have qualified.

Section 4

Power of Congress in Presidential succession.—The Congress may by law provide for the case of the death of any of the persons from whom the House of Representatives may choose a President whenever the right of choice shall have devolved upon them, and for the case of the death of any of the persons from whom the Senate may choose a Vice-President whenever the right of choice shall have devolved upon them.

Section 5

Time of taking effect.—Sections 1 and 2 shall take effect on the 15th day of October following the ratification of this article.

Section 6

Ratification.—This article shall be inoperative unless it shall have been ratified as an amendment to the Constitution by the legislatures of three-fourths of the several States within seven years from the date of its submission.

[The Twenty-first Amendment, repealing prohibition, was proposed by the second session of the Seventy-second Congress on February 20, 1933, and became effective with ratification by Utah, the thirty-sixth state to ratify, on December 5, 1933.]

ARTICLE XXI

Section 1

Repeal of Prohibition Amendment.—The eighteenth article of amendment to the Constitution of the United States is hereby repealed.

Section 2

Transportation of Intoxicating Liquors.—The transportation or importation into any State, Territory, or possession of the United States for delivery or use therein of intoxicating liquors, in violation of the laws thereof, is hereby prohibited.

Section 3

Ratification.—This article shall be inoperative unless it shall have been ratified as an amendment to the Constitution by conventions in the several States, as provided in the Constitution, within seven years from the date of the submission hereof to the States by the Congress.

AMERICAN ECONOMY



ESSENTIAL FACTS *about* BUSINESS • AGRICULTURE

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by THE RESEARCH INSTITUTE of AMERICA, Inc.

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ECONOMICS IS MORE THAN THE favorite pastime of a handful of college professors and government officials. It is the sum total of the plants and facilities which help make the goods we buy and use; it includes the service establishment, wholesale house and the corner grocer which help bring the goods and services closer to the ultimate customer. And finally, it includes all of us, 143 million Americans who help the American economy produce and at the same time, as consumers, share its products.

This portion of the *Information Please Almanac* presents essential facts about this economy of ours, what it consists of and how its components work together to turn out the highest standard of living in the world. The statistical tables afford a view of where we stand and how we have come here; imagination must tell us to what new highs the steady progress will eventually carry us.

Our personal fortunes are inextricably tied to what happens in these economic areas. Useful as this section may be as a reference source to answer specific questions, it is intended to do more. Exploring it, page by page, should give the reader an understanding of what the American economy is and what makes it tick.

Statistical Section

Basic facts on American business (starting on the next page) gives a bird's-eye view of American production and income. It shows the relative importance of various industries and trades and the changes which the recent war has wrought in our material fortunes.

What industry makes (starting on page 10) takes a closer look at our industrial output. It follows the steady rise in indus-

trial production since Civil War days, the changes which the war and postwar periods have brought about, and highlights the relative ease with which we have gone through the transitions of the last few years.

What farmers produce (starting at page 316) proves that we are the leading nation in agricultural output as well as in the industrial field, and shows the reasons why.

What commerce distributes (starting at page 319) deals with the wholesale and retail channels through which industry's products flow to the final consumer.

What services contribute (starting at page 322) shows the important place which the hundreds of thousands of small service establishments play in providing us with daily conveniences, the importance of banking and stock exchanges to the financing of our economic effort, and the growing part which advertising plays in bringing buyer and seller together.

What government does and costs (starting at page 326) contains some vital facts on the ever-growing role of government in our everyday lives.

How we work (starting at page 329) deals with all of us: how we are employed, how long we work and what we accomplish.

What we earn and spend—what living costs us (starting at page 332) traces the steady rise in our incomes which is impressive indeed—even after allowing for the higher cost of living. It shows how prices have risen to their high 1948 level—and offers some comfort by proving how they eventually drop in postwar periods.

What we own (starting at page 340) and *what we owe* (starting at page 342) take inventory of the national assets and liabilities in which all of us share.

BASIC FACTS ON AMERICAN BUSINESS

A good measure of our economic health is the Gross National Product which shows the total expenditure by individuals, business and government for goods and services produced by the economy. It more than doubled during the recent war and, contrary to many expectations, even exceeded that unprecedented level in the early postwar years. Private investment and personal consumption quickly took up most of the slack created by the drop in government expenditures for war.

Our national income also continues at just about twice its size during the boom year of 1929. A drop in government payments and a smaller decline in manufacturing which were inevitable after the end of the war, were largely made up by increases in wholesale and retail trades, services, agriculture, communications and public utilities.

These broad over-all figures obscure, of course, many individual differences. Billion dollar companies and other large concerns account for two-thirds of our output though there are 93 small businesses for every 7 large ones. The average income varies greatly between different states and finally our past history indicates a consistent pattern of ups and downs in our economic well being.

In the favorable economic climate of the early postwar period, the business population was fast growing to unprecedented highs; business failures at the same time continued at a record low.

Gross National Product or Expenditure (in millions of dollars)

Source: U. S. Department of Commerce.

Item	1929	1933	1941	1944	1945	1946	1947	1948*
Gross national product	103,828	55,760	125,294	212,231	213,429	209,266	231,636	246,000
Personal consumption expenditures	78,761	46,346	82,255	111,401	122,830	147,363	164,755	173,550
Durable goods	9,362	3,503	9,750	6,890	8,254	16,242	20,963	21,850
Nondurable goods	37,742	22,254	43,960	67,473	75,367	87,478	96,487	101,700
Services	31,657	20,589	28,545	37,038	39,209	43,643	47,305	50,000
Gross private domestic investment	15,824	1,306	17,211	6,395	9,244	26,458	30,031	37,850
New construction	7,824	1,142	5,661	2,347	3,314	8,903	11,662	14,300
Producers' durable equipment	6,438	1,783	7,676	5,402	7,272	12,784	17,751	20,100
Change in business inventories	1,562	-1,619	3,874	-1,354	-1,342	4,771	618	3,450
Net foreign investment	771	150	1,124	-2,099	-1,438	4,672	8,898	3,900
Government purchases	8,472	7,958	24,704	96,534	82,793	30,773	27,952	30,750
Federal	1,311	2,018	16,923	89,006	74,796	20,792	15,616	16,950†
War	1,344	2,022	13,794	88,615	75,923	21,184	16,926	.....
Nonwar	.....	.....	3,173	1,552	1,031	2,469	.....	.....
Less: Government sales	33	4	44	1,161	2,158	2,861	1,310	.....
State and local	7,161	5,940	7,781	7,528	7,997	9,981	12,336	13,800

*First half at annual rate. †Less government sales.

National Income by Industrial Origin (in millions of dollars)

Source: U. S. Department of Commerce.

Industry	1929	1933	1939	1941	1944	1945	1946	1947	1947 % of total
All industries, total	87,355	39,584	72,532	103,834	182,407	181,731	179,289	202,500	100.00
Agriculture, forestry, and fisheries	8,002	3,521	6,120	8,880	14,805	15,255	17,972	19,287	9.52
Farms	7,791	3,402	5,951	8,655	14,469	14,917	17,585	18,885	9.33
Agricultural and similar service establishments	119	87	117	148	217	203	229	232	.11
Forestry	26	11	12	14	30	34	45	47	.02
Fisheries	66	21	40	63	89	101	113	123	.06
Minig.	2,097	662	1,601	2,341	2,943	2,799	3,007	4,034	1.99
Metal mining	478	41	348	513	417	350	329	560	.28
Anthracite mining	285	130	126	165	238	219	265	281	.14
Bituminous and other soft coal	652	255	503	809	1,271	1,206	1,255	1,729	.85
Crude petroleum and natural gas	486	195	497	654	793	800	883	1,123	.55
Nonmetallic mining	196	41	127	200	224	224	275	341	.17
Contract construction	3,691	735	2,254	4,370	4,118	4,212	6,488	8,733	4.31

Industry	1929	1933	1939	1941	1944	1945	1946	1947	1947 % of total
Manufacturing	22,012	7,563	17,936	32,897	60,055	51,937	48,125	61,715	30.47
Food and kindred products.....	2,157	1,335	2,280	2,683	5,040	5,155	5,566	6,469	3.20
Tobacco manufactures.....	258	142	298	215	293	217	292	369	.18
Textile-mill products.....	1,797	697	1,259	2,036	2,959	3,015	4,113	5,100	2.52
Apparel, other finished fabrics.....	1,240	532	1,016	1,429	2,534	2,668	3,247	3,673	1.81
Lumber and timber basic products.....	850	122	491	887	1,165	1,089	1,447	2,053	1.01
Furniture and finished lumber.....	678	183	508	765	987	1,007	1,253	1,439	.71
Paper and allied products.....	563	290	555	1,034	1,346	1,348	1,708	2,348	1.16
Printing and publishing.....	1,580	790	1,206	1,359	2,054	2,263	2,707	3,095	1.53
Chemicals and allied products.....	1,136	690	1,205	1,941	3,358	3,240	3,097	3,610	1.78
Products of petroleum and coal.....	993	17	458	833	1,362	1,334	1,632	2,350	1.16
Rubber products.....	356	103	279	485	996	939	1,029	1,128	.56
Leather and leather products.....	601	270	423	614	863	899	1,024	1,201	.59
Stone, clay and glass products.....	799	208	662	1,072	1,123	1,128	1,524	1,899	.94
Iron and steel and products.....	2,978	682	2,259	5,048	9,052	7,428	5,812	8,186	4.04
Nonferrous metals and products.....	767	155	594	1,201	1,896	1,649	1,689	2,134	1.05
Machinery (except electrical).....	1,903	426	1,492	3,850	5,840	5,056	4,480	6,117	3.02
Electrical machinery.....	1,048	276	850	1,915	3,722	3,090	2,292	3,420	1.69
Transportation equipment, except autos.....	317	63	397	2,276	12,480	7,746	1,872	1,980	.98
Automobiles and auto equipment.....	1,394	384	1,188	2,364	1,411	1,124	1,759	3,416	1.69
Miscellaneous.....	537	192	516	890	1,574	1,542	1,582	1,728	.85
Wholesale and retail trade	13,090	5,375	12,126	15,903	23,846	26,619	33,225	37,531	18.53
Wholesale trade.....	3,955	1,631	3,558	4,795	6,803	7,452	8,823	10,326	5.10
Retail trade and auto services.....	9,135	3,744	8,568	11,127	17,043	19,167	24,402	27,205	13.43
Finance, insurance and real estate	13,038	5,681	8,216	9,583	13,255	13,964	15,046	16,479	8.13
Banking.....	1,960	433	876	1,028	1,664	1,865	2,184	2,439	1.20
Security and commodity brokers, dealers and exchanges.....	644	256	160	91	203	299	299	198	.10
Finance, n.e.c.....	135	—9	160	206	266	283	366	427	.21
Insurance carriers.....	788	514	854	843	1,022	1,011	1,207	1,329	.66
Insurance agents and combination offices.....	533	367	491	553	652	698	910	1,017	.50
Real estate.....	8,978	4,060	5,675	6,748	9,448	9,808	10,080	11,069	5.46
Transportation	6,562	2,958	4,543	6,180	11,206	10,549	10,318	11,382	5.63
Railroads.....	4,600	1,849	2,735	3,778	6,955	6,058	5,576	6,199	3.06
Local railways and bus lines.....	592	331	338	329	571	575	632	669	.33
Highway passenger transportation.....	231	118	177	251	676	692	777	782	.39
Highway freight transportation.....	482	356	642	906	1,310	1,398	1,681	1,972	.97
Water transportation.....	267	153	280	437	857	995	797	793	.39
Air transportation (common carriers).....	—3	10	44	77	177	193	236	257	.13
Pipe-line transportation.....	130	47	131	145	147	133	137	153	.08
Services allied to transportation.....	263	94	196	266	513	505	482	557	.28
Communications and public utilities	2,878	2,000	2,863	3,313	4,101	4,323	4,948	5,402	2.67
Telephone and telegraph.....	1,130	692	1,008	1,135	1,676	1,767	2,027	2,133	1.06
Radio broadcasting.....	28	14	75	106	177	189	212	226	.11
Utilities: electric and gas.....	1,640	1,237	1,716	2,002	2,167	2,261	2,611	2,936	1.45
Local public services, n.e.c.....	80	57	64	70	81	86	98	107	.05
Services	10,168	5,447	8,080	9,709	13,569	14,555	17,184	18,831	9.31
Hotels and lodging places.....	577	193	436	520	912	1,003	1,226	1,289	.64
Personal services.....	1,220	667	1,001	1,320	1,985	2,145	2,654	2,731	1.35
Private households.....	3,117	1,177	1,761	2,076	2,220	2,444	2,581	3,070	1.52
Commercial and trade schools and em- ployment agencies.....	49	15	35	62	147	85	102	136	.07
Business services, n.e.c.....	564	332	637	753	1,065	1,223	1,554	1,698	.84
Misc. repair services and hand trades.....	284	175	238	389	718	664	845	948	.47
Motion pictures.....	432	209	428	497	851	889	1,115	1,046	.51
Amusement and recreation, except motion pictures.....	371	152	278	338	452	541	741	760	.38
Medical and health services.....	1,522	937	1,365	1,587	2,288	2,396	2,704	3,148	1.55
Legal services.....	689	561	692	763	1,046	1,135	1,292	1,384	.68
Engineering, other professional, n.e.c.....	243	113	210	333	485	536	656	777	.38
Educational services, n.e.c.....	473	400	452	471	539	580	678	743	.37
Religious organizations.....	355	289	303	300	341	354	368	396	.20
Nonprofit organizations, n.e.c.....	272	227	244	300	520	560	668	705	.35
Government and government enterprises	5,114	5,349	8,550	10,479	34,283	37,360	22,681	18,687	9.23
Federal—general government.....	900	1,187	3,444	5,046	27,978	30,526	14,529	9,173	4.53
Federal—government enterprises.....	581	485	716	788	1,082	1,151	1,410	1,426	.70
State and local—general government.....	3,456	3,531	4,185	4,368	4,883	5,323	6,320	7,590	3.75
State and local—government enterprises.....	177	146	205	277	340	360	422	498	.25
Rest of the world.....	643	293	243	231	226	158	295	419	.21

The "Big Three" of Various Industries, 1945

Source: U. S. Department of Commerce.

Group and company	Assets (in millions of dollars)	Rank in total industry
Food and Kindred Products		
Swift & Co.	353.2	25
Armour & Co. (Ill.) ..	349.5	27
National Dairy Products Corp. .	242.5	43
Tobacco Manufacturers		
The American Tobacco Co.	483.5	15
R. J. Reynolds Tobacco Co.	315.2	30
Liggett & Myers Tobacco Co.	293.4	33
Textile Mill Products		
American Woolen Co.	104.3	104
Armstrong Cork Co.	79.9	129
Cannon Mills Co.	74.5	137
Chemicals and Allied Products		
E. I. DuPont De Nemours & Co.	1,025.3	5
Union Carbide & Carbon Corp. .	428.1	20
Allied Chemical & Dye Corp.	285.9	34
Products of Petroleum and Coal		
Standard Oil Co. (N. J.)	2,531.8	1
Socony-Vacuum Oil Co., Inc.	1,075.8	4
Standard Oil Co. (Ind.)	946.1	6
Rubber Products		
Goodyear Tire & Rubber Co.	340.8	28
Firestone Tire & Rubber Co.	300.1	32
United States Rubber Co.	94.8	42
Stone, Clay and Glass Products		
Pittsburgh Plate Glass Co.	154.4	71
Owens-Illinois Glass Co.	122.8	93
U. S. Gypsum Co.	81.1	130
Iron and Steel		
U. S. Steel Corp.	1,890.8	2
Bethlehem Steel Corp.	880.9	8
Republic Steel Corp.	412.9	23
Nonferrous Metals		
Anaconda Copper Mining Co.	616.1	13
Kennecott Copper Corp.	464.8	16
Aluminum Co. of America.	427.2	21
Machinery (except electrical)		
International Harvester Co.	558.7	14
Singer Manufacturing Co.	225.4	48
Allis-Chalmers Mfg. Co.	198.0	54
Electrical Machinery		
General Electric Co.	891.8	7
Westinghouse Electric Corp.	449.8	18
Western Electric Co., Inc.	352.3	26
Automobiles		
General Motors Corp.	1,813.9	3
Ford Motor Co.	815.5	10
Chrysler Corp.	414.2	22
Paper and Allied Products		
International Paper Co.	258.7	41
Crown Zellerbach Corp.	116.5	96
St. Regis Paper Co.	72.1	144
Transportation Equipment (except autos)		
Pullman, Inc.	272.8	37
United Aircraft Corp.	178.8	62
Lockheed Aircraft Corp.	162.8	66
Furniture and Fixtures		
Simmons Co.	40.7	229
Kroehler Mfg. Co.	13.8	587
General Fireproofing Co.	12.8	622
Leather and Leather Products		
International Shoe Co.	94.8	114
Endicott Johnson Corp.	57.4	177
Brown Shoe Co., Inc.	24.2	372

Current Assets and Liabilities of All U. S. Corporations

(in billions of dollars)

Source: U. S. Securities and Exchange Commission.

	December 31				
	1939	1943	1945	1946	1947
Current assets:					
Cash on hand and in banks.	10.8	21.6	21.6	21.3	22.9
U.S. Gov't securities.	2.2	16.4	21.0	14.9	13.7
Inventories.	18.0	27.6	27.0	35.7	42.1
Receivables from U.S. Gov't. ....	...	5.0	2.7	.7	35.7
Other notes and accounts receivable.	22.1	21.9	21.9	29.3	
Other.	1.4	1.3	2.4	1.7	1.6
Total.	54.5	93.8	96.6	103.6	116.0
Current liabilities:					
Federal income tax.	1.2	16.6	10.4	7.9	10.0
Advancements and prepayments, U.S. Gov't. ....	...	2.2	.9	.1	34.2
Other notes and accounts payable.	21.9	24.1	24.5	30.2	
Other.	6.9	8.7	9.0	9.0	10.0
Total.	30.0	51.6	44.8	47.1	54.2
Net working capital.	24.5	42.1	51.8	56.5	61.8
Ratio:					
Current assets per dollar of current liabilities.	1.8	1.8	2.2	2.2	2.1

Number of Corporations in the U. S.

Source: U. S. Treasury Department.

Year	Active corporation	Inactive corporation
1929.	456,021	53,415
1933.	446,842	57,238
1935.	477,113	56,518
1937.	477,838	51,259
1939.	469,617	46,343
1940.	473,042	43,741
1941.	468,906	40,160
1942.	442,665	37,012
1943.	420,485	35,268
1944.	412,467	34,329
1945.	421,125	33,335

Small Business in U. S., 1939

Small business consists of manufacturing concerns with 100 employees or fewer; wholesale concerns with less than \$200,000 net annual sales volume; remainder of establishments with net annual sales or receipts of less than \$50,000.

Industry	By number of firms (thousands)	By value of output (in millions of dollars)
	(Percentage of total business in parentheses)	
Manufacturing.	169 (92%)	17,367 (31%)
Wholesaling.	72 (77%)	4,100 (21%)
Retailing.	1,614 (91%)	17,836 (42%)
Service establishments.	638 (99%)	2,242 (66%)
Hotels.	25 (90%)	229 (27%)
Construction.	200 (93%)	1,547 (34%)
Amusement places.	40 (90%)	333 (33%)
Total.	2,758 (93%)	43,654 (34%)

Regional Economic Differences

Sources: U. S. Depts. of Commerce and Labor and Broadcast Measurement Bureau.

State	Value of mfrs. (\$ millions, 1940)	Retail sales (\$ millions, 1940)	Income received per capita, 1947	% increase per capita income received 1940-47	Manu- facturing employment (in thousands) 1947	Percent of homes with telephones, Jan., 1948	Percent of homes with radios, 1948
New England.....	4,891	3,317	.....	.....	.....	75	98
Maine.....	345	281	1,128	122	113	67	95
New Hampshire.....	237	183	1,148	110	82	74	97
Vermont.....	103	123	1,183	127	40	71	96
Massachusetts.....	2,460	1,738	1,449	89	743	76	99
Rhode Island.....	516	275	1,521	113	150	65	99
Connecticut.....	1,230	717	1,671	102	415	80	99
Middle Atlantic.....	16,039	10,291	.....	.....	.....	61	96
New York.....	7,134	5,578	1,781	106	1,894	60	97
New Jersey.....	3,429	1,580	1,542	92	750	64	97
Pennsylvania.....	5,476	3,133	1,372	118	1,506	62	95
East North Central.....	17,561	9,251	.....	.....	.....	71	97
Ohio.....	4,585	2,441	1,441	124	1,245	71	97
Indiana.....	2,228	1,066	1,287	138	557	70	97
Illinois.....	4,795	2,858	1,624	124	1,248	71	98
Michigan.....	4,348	1,821	1,424	119	1,019	72	98
Wisconsin.....	1,605	1,065	1,337	159	434	69	98
West North Central.....	3,816	4,139	.....	.....	.....	69	96
Minnesota.....	846	1,017	1,195	135	200	77	98
Iowa.....	719	823	1,144	136	148	78	97
Missouri.....	1,388	1,103	1,197	137	358	58	94
North Dakota.....	44	156	1,678	356	7	54	97
South Dakota.....	81	169	1,348	259	11	72	96
Nebraska.....	274	397	1,238	186	45	73	96
Kansas.....	464	474	1,315	212	80	70	95
South Atlantic.....	5,391	4,368	.....	.....	.....	39	88
Delaware.....	115	110	1,646	84	46	64	95
Maryland.....	1,027	619	1,465	105	230	55	96
District of Columbia.....	80	403	1,624	50	17	77	97
Virginia.....	989	628	1,064	136	212	45	89
West Virginia.....	442	404	1,031	159	132	42	92
North Carolina.....	1,421	633	890	182	372	28	87
South Carolina.....	398	332	778	172	192	22	83
Georgia.....	677	625	885	181	252	34	83
Florida.....	242	614	1,104	134	82	35	87
East South Central.....	1,959	1,844	.....	.....	.....	33	85
Kentucky.....	481	520	850	176	128	37	89
Tennessee.....	728	606	916	189	250	45	87
Alabama.....	575	436	837	212	226	28	83
Mississippi.....	175	282	659	226	93	19	80
West South Central.....	2,567	3,101	.....	.....	.....	41	87
Arkansas.....	160	298	710	182	72	23	84
Louisiana.....	565	486	892	150	138	39	84
Oklahoma.....	312	513	930	161	55	52	90
Texas.....	1,530	1,804	1,128	173	334	44	88
Mountain.....	820	1,428	.....	.....	.....	52	96
Montana.....	152	222	1,641	186	18	50	97
Idaho.....	90	176	1,290	193	19	50	97
Wyoming.....	45	100	1,472	143	6	52	97
Colorado.....	222	409	1,482	183	56	65	97
New Mexico.....	25	126	1,053	196	10	32	91
Arizona.....	98	162	1,120	137	14	35	94
Utah.....	167	171	1,208	152	25	64	98
Nevada.....	21	62	1,842	120	3	50	96
Pacific.....	3,800	4,299	.....	.....	.....	63	98
Washington.....	637	669	1,395	121	176	65	98
Oregon.....	365	442	1,253	116	117	53	97
California.....	2,798	3,188	1,643	104	712	63	98
Total.....	56,843	42,042	1,323	130	25,032	58	94

Business Cycles in the United States (Standard Reference Dates)

Source: National Bureau of Economic Research.

Peak of expansion	Trough of contraction	Duration in months		
		Expansion	Contraction	Full cycle
June.....1857*	December.....1858	30	18	48
October.....1860	June.....1861	22	8	30
April.....1865	December.....1867	46	32	78
June.....1869	December.....1870	18	18	36
October.....1873	March.....1879	34	65	99
March.....1882	May.....1885	36	38	74
March.....1887	April.....1888	22	13	35
July.....1890	May.....1891	27	10	37
January.....1893	June.....1894	20	17	37
December.....1895	June.....1897	18	18	36
June.....1899	December.....1900	24	18	42
September.....1902	August.....1904	21	23	44
May.....1907	June.....1908	33	13	46
January.....1910	January.....1912	19	24	43
January.....1913	December.....1914	12	23	35
August.....1918	April.....1919	44	8	52
January.....1920	September.....1921	9	20	29
May.....1923	July.....1924	20	14	34
October.....1926	December.....1927	27	14	41
June.....1929	March.....1933	18	45	63
May.....1937	May.....1938	50	12	62
Average duration 21 cycles 1855 to 1938.....		26.2	21.5	47.7

*Date of previous trough of contraction was December, 1854.

Business Population

(in thousands of concerns)

Source: U. S. Department of Commerce, Dun & Bradstreet.

Item	September 30								
	1929	1933	1939	1941	1943	1944	1945	1946	1947*
Total operating businesses.....	3,060	2,850	3,317	3,398	2,861	2,924	3,134	3,595	3,817
Manufacturing.....	251	169	214	226	229	236	256	299	318
Wholesale trade.....	120	117	145	146	115	122	137	166	180
Retail trade.....	1,361	1,340	1,601	1,621	1,330	1,354	1,450	1,662	1,755
Transportation, communications, public utilities.....	167	152	208	209	188	193	203	217†	228†
Finance, insurance & real estate.....	306	276	286	285	261	274	283	295†	301†
Service industries.....	596	585	639	644	554	565	603	682	727
Mining & quarrying.....	23	21	21	23	26	26	26	3,495†	3,786†
Contract construction.....	236	191	202	244	158	153	176	242	276
New entrants‡.....	—	—	—	517	163	340	422	615	409
Discontinued businesses‡.....	—	—	—	480	395	172	152	182	219
Commercial & industrial failures§.....	23	20	15	12	3	1	1	1	3.5

*Preliminary figures. †June 30th figures. ‡Calendar Year. §Closures resulting in a known loss to creditors.

WHAT INDUSTRY MAKES

American industry is the most productive in the world. Because of its unsurpassed stock of modern plants, machinery and other productive equipment, the training and efficiency of its more than twenty million workers, and the skillful productive techniques instituted and supervised by intelligent management, industrial output per man-hour in the United States is reliably estimated at approximately twice the British level, three to four times the prewar French and German achievements, and many more times those of other European countries.

Manufacturing is the pivotal industrial occupation, for its periodic expansions and contractions largely determine the level of activity achieved in every other sector of the economy. Most pronounced during the war years was the expansion in durable manufactures, though statistics for most industries show considerable expansion.

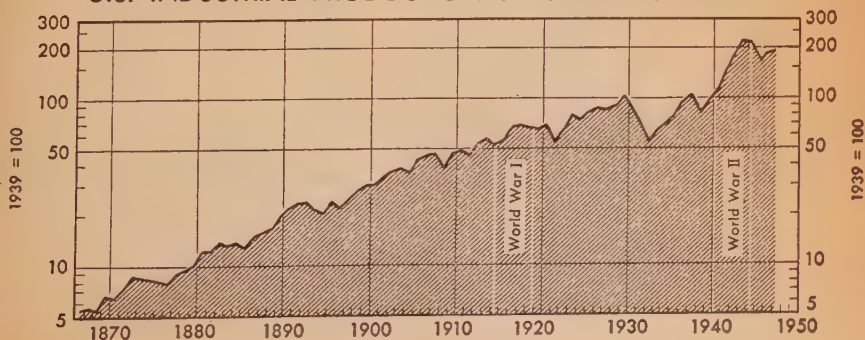
The early postwar period saw a quick rise in industrial production for civilian purposes which took up much of the drop in the output of war goods. Construction, however, failed to score the spectacular advances which had been expected. As shown by the average age of the American homes, however, a tremendous market still exists and the residential building boom which got under way in 1947 promises to produce an unprecedented level of activity once this industry's cost and production problems are fully solved.

Manufactures by Industry Group, 1939

Source: U. S. Department of Commerce, U. S. Treasury Department.

Group	Number of establishments	Wage earners (average for the year)	Wages (in thousands of dollars)	Value of products	Net capital per wage earner in dollars
Durable manufactures					
Iron and steel and their products except machinery.....	8,994	966,367	1,313,633	6,591,530	6,689
Machinery (except electrical).....	9,506	522,980	748,288	3,254,174	7,187
General industrial machinery.....	5,200	172,104	237,363	1,062,931	.....
Metalworking machinery.....	1,332	77,684	128,769	442,650	.....
Special industrial machinery.....	1,346	64,678	88,791	349,508	.....
Household and service-industry machines.....	472	53,171	72,302	391,792	.....
Other.....	1,156	155,343	221,063	1,007,293	.....
Electrical machinery.....	2,014	256,467	335,820	1,727,390	5,527
Transportation equipment except automobiles.....	968	157,097	239,254	882,897	7,879
Automobiles and automobile equipment.....	1,133	398,963	646,406	4,407,873	6,968
Nonferrous metals and their products.....	5,600	228,753	299,220	2,572,854	5,646
Lumber and timber basic products.....	11,520	360,613	310,381	1,122,058	3,313
Furniture and finished lumber products.....	8,457	293,570	274,738	1,267,724	3,061
Stone, clay, and glass products.....	7,024	287,524	329,559	1,440,151	6,038
Total.....	55,216	3,472,334	4,497,299	22,906,651	5,985
Nondurable manufactures					
Textile-mill products and other fiber manufactures.....	6,444	1,082,602	908,379	3,930,678	2,777
Cotton manufactures.....	1,248	409,317	292,536	1,168,171	.....
Rayon and silk manufactures.....	829	119,821	93,343	441,900	.....
Woolen and worsted manufactures.....	722	149,915	143,494	735,905	.....
Other.....	3,645	403,549	379,006	1,584,702	.....
Apparel and other finished products.....	20,206	751,377	654,402	3,325,015	1,096
Leather and leather products.....	3,508	327,663	294,290	1,389,514	2,346
Food and kindred products.....	52,213	911,218	982,485	11,940,215	7,661
Paper and allied products.....	3,279	264,716	309,857	2,019,568	6,706
Printing, publishing and allied industries.....	24,878	324,535	493,616	2,578,464	5,951
Products of petroleum and coal.....	989	105,428	173,702	2,953,973	59,486
Chemicals and allied products.....	9,203	287,136	356,176	3,733,658	13,983
Rubber products.....	595	120,740	161,410	902,329	7,000
Miscellaneous industries.....	7,699	238,827	258,325	1,162,958	4,418
Total.....	129,014	4,414,242	4,592,642	33,936,372	6,197
All manufacturing industries.....	184,230	7,886,576	9,089,941	56,843,023	6,135

U.S. INDUSTRIAL PRODUCTION SINCE THE CIVIL WAR



Industrial Production Indexes, by Groups

(1935-39 average = 100)

Source: Board of Governors of the Federal Reserve System.

Item	1919	1926	1929	1932	1939	1940	1941	1943	1945	1946	1947	1948*
Durable manufactures												
Iron and steel.....	84	115	133	32	114	147	186	208	183	150	195	199
Machinery.....	—	102	130	43	104	136	221	443	343	240	276	280
Transportation equipment.....	—	109	134	38	103	145	245	735	487	232	230	234
Nonferrous metal and products.....	—	113	136	52	113	139	191	267	204	155	187	198
Lumber and products.....	—	148	146	51	106	116	134	129	109	131	143	149
Stone, clay and glass products.....	50	105	110	51	114	124	162	173	163	192	206	207
Total.....	84	114	132	41	109	139	201	360	274	192	220	224
Nondurable manufactures												
Textiles and products.....	73	84	94	71	112	114	152	153	146	162	163	177
Leather and products.....	94	90	95	76	105	98	123	114	117	122	116	115
Manufactured food products.....	77	87	101	79	108	113	127	145	150	150	157	158
Alcoholic beverages.....	—	—	—	—	98	101	117	117	178	191	190	181
Paper and products.....	—	72	85	65	114	123	150	139	139	145	158	166
Tobacco products.....	72	88	96	79	106	109	120	133	136	156	160	164
Printing and publishing.....	—	92	104	74	106	112	127	111	108	127	144	153
Petroleum and coal products.....	—	76	96	69	110	120	135	185	235	173	193	215
Chemical products.....	—	70	89	68	112	130	176	384	284	236	251	251
Rubber products.....	—	80	100	64	113	123	163	228	215	225	226	238
Total.....	62	79	93	70	109	115	142	176	166	165	172	178
Total, durable and nondurable manufactures.....	72	95	110	57	109	126	168	258	214	177	193	199
Minerals												
Fuels.....	—	95	103	72	105	114	122	132	143	142	154	157
Metals.....	—	126	134	36	113	134	149	126	101	88	118	124
Total.....	71	100	107	67	106	117	125	132	137	134	149	152
Total, manufactures and minerals..	72	96	110	58	109	125	162	239	203	170	189	191

*First 5 months seasonally adjusted average.

Electric Energy Output of Utilities*

(in millions of kilowatt hours)

Source: Federal Power Commission.

Year	Total	Ownership					% Public to total	Source of energy	
		Privately owned	Publicly owned†	Municipal	Federal	Cooperatives power districts, state projects		Fuels	Fuels as % of total
1920.....	39,405	37,716	1,689	1,373	58	94	4.3	23,644	60.0
1929.....	92,180	87,514	4,667	3,498	300	451	5.1	59,533	64.6
1932.....	79,393	74,488	4,905	3,517	445	572	6.2	46,515	58.6
1933.....	81,740	76,668	5,072	3,583	459	654	6.2	48,283	59.1
1935.....	95,287	89,330	5,958	4,229	555	732	6.3	56,915	59.7
1936.....	109,316	102,293	7,023	4,705	1,072	801	6.4	70,258	64.3
1937.....	118,913	110,464	8,449	5,270	1,843	863	7.1	74,900	63.0
1938.....	113,812	104,090	9,722	5,237	3,029	994	8.5	69,533	61.1
1939.....	127,642	115,078	12,564	5,688	5,476	944	9.8	84,078	65.9
1940.....	141,837	125,411	16,426	6,188	8,584	1,175	11.6	94,516	66.6
1941.....	164,788	144,290	20,498	7,023	10,793	2,192	12.4	113,925	69.1
1942.....	185,979	158,052	27,928	7,610	16,893	2,848	15.0	122,109	65.7
1943.....	217,759	180,247	37,511	9,223	24,485	3,156	17.2	144,127	66.2
1944.....	228,189	185,850	42,339	9,637	28,866	3,065	18.6	154,244	67.6
1945.....	222,486	180,928	41,560	9,624	28,001	3,146	18.7	142,516	64.1
1946.....	223,130	181,048	42,081	10,702	26,984	3,596	18.9	144,732	64.9
1947.....	255,725	208,061	47,664	12,453	29,890	4,490	18.6	177,000	69.2

*Output by industrial establishments was as follows (in millions of kilowatt hours): 1939—33,667; 1940—38,070; 1941—43,519; 1942—47,187; 1943—49,781; 1944—51,336; 1945—48,769; 1946—46,440; 1947—51,023.

†Includes non-central stations.

Fuel Production

Source: U. S. Dept. of Interior, U. S. Dept. of Commerce, and American Gas Association.

Year	Coke, in thousands of short tons	Anthracite coal, in thousands of short tons	Bituminous coal, in thousands of short tons	Natural gas, in millions of cubic feet (produced and marketed)*	Manufactured gas, in millions of cubic feet†	Crude petroleum, in thousands of 42-gal. barrels
1929.....	59,884	73,828	534,989	1,917,693	381,400	1,007,323
1933.....	27,589	49,541	333,631	1,555,474	334,529	905,656
1937.....	52,375	51,856	445,531	2,407,620	328,313	1,279,160
1938.....	32,496	46,099	348,545	2,295,562	323,623	1,214,355
1939.....	44,327	51,487	394,855	2,476,756	334,830	1,264,962
1941.....	65,187	56,368	514,149	2,812,658	369,283	1,402,228
1942.....	70,569	60,328	582,693	3,053,475	395,883	1,386,645
1943.....	71,676	60,644	590,177	3,414,689	417,046	1,506,000
1944.....	73,703	64,445	619,576	3,711,000	430,285	1,677,753
1945.....	66,795	54,830	577,617	3,919,000	475,905	1,711,103
1946.....	58,041	60,685	533,922	4,031,000	490,209	1,733,424
1947.....	75,310	57,000	618,750	4,400,000‡	523,096	1,856,107
1948§.....	37,016	28,419	283,108	.....	.....	988,172

*Includes all natural gas in sales of natural gas mixed with manufactured gas. †Includes all manufactured gas products produced and purchased by gas utilities. ‡Preliminary figure. §First 6 months.

Textile Consumption

Source: U. S. Dept. of Commerce.
The Rayon organon.

Year	Cotton (thousands of bales)	Wool consumption* (millions of lbs.)	Filament rayon yarn (thousands of lbs.)
1920....	5,843	314	8,760
1929....	5,407	368	131,760
1932....	5,017	230	152,520
1939....	7,370	396	359,760
1941....	10,586	648	452,520
1942....	11,434	616	468,840
1943....	10,666	636	494,400
1944....	9,691	623	538,800
1945....	9,143	645	602,400
1946....	9,827	748	666,400
1947....	9,539	698	729,300
1948†....	4,940	374	404,100

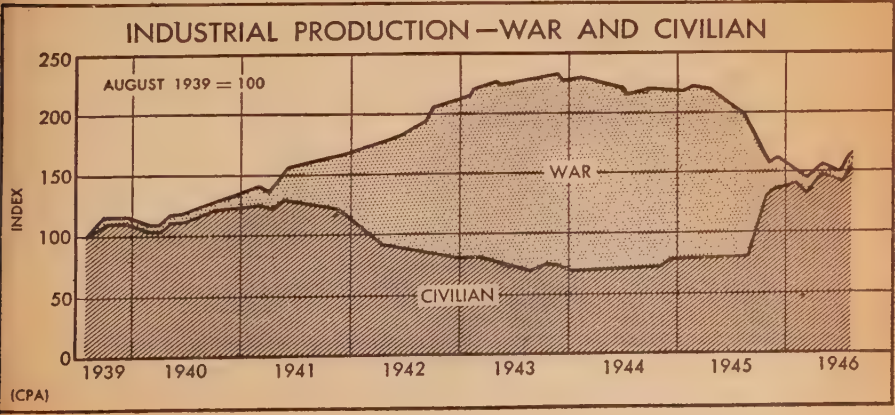
Aircraft Production*

Source: Auto and Aviation Industries.

Year	Number			Value† (in thousands of dollars)
	Civil‡	Military‡	Total	
1919.....	.....	.....	662	8,046
1929.....	5,357	677	6,631	51,508
1933.....	591	466	1,179	15,860
1937.....	2,281	949	3,100	38,664
1939.....	3,770	2,141	5,911	75,873
1941.....	6,844	19,433	26,277	819,000
1942.....	985	47,836	48,821	2,762,000
1943.....	.....	85,898	85,898	6,696,000
1944.....	.....	96,318	96,318	9,233,000
1945.....	2,047	47,714	49,761	5,141,000
1946.....	34,874	1,330	36,204	362,772
1947.....	15,616	2,102	17,738	671,432

*Includes airplanes, seaplanes and amphibians.
†Do not add up to totals because of difference in sources. ‡Values of engines, propellers and power plant accessories for 1931 to 1940 not included. 1940 to date, included in the value of military aircraft only.

*Scoured basis. †First 6 months.



Metals Production

(In thousands of short tons)

Source: American Iron & Steel Institute, Iron Age, Copper Institute, Zinc Institute, American Bureau of Metal Statistics and U. S. Bureau of Mines.

Year	Pig iron and ferro-alloys	Steel ingots and castings	Hot rolled finished iron and steel products Total	Plates and sheets	Aluminum (primary)	Copper (smelter out put from domestic ore)	Zinc (primary slab produced from domestic ore)	Refined lead (from domestic ore; anti-monial lead excluded)
1929.....	47,728	63,205	45,998	13,929	113,986	1,001,432	612,136	672,498
1932*.....	9,835	15,323	11,705	3,857	42,562	225,000	306,010	259,616
1937.....	41,583	56,637	41,178	15,721	146,340	834,661	551,165	443,142
1939.....	35,677	52,799	39,068	13,932	163,545	712,675	491,058	420,967
1941.....	56,687	82,839	62,324	20,293	309,067	966,072	652,599	470,517
1942.....	60,903	86,032	62,446	21,237	521,106	1,087,991	629,957	467,367
1943.....	62,770	88,837	63,293	22,543	920,179	1,092,939	594,250	406,544
1944.....	62,866	89,642	65,804	23,463	776,446	1,003,379	574,453	394,443
1945.....	54,919	79,702	59,812	19,314	495,060	772,894	467,084	356,535
1946.....	46,515	66,603	50,937	16,324	409,630	608,737	459,205	293,309
1947.....	58,222	84,894	66,202	25,197	571,750†	846,389†	514,100	400,000

*1933 for nonferrous metals. †Preliminary.

Production of Chemicals

Source: U. S. Department of Commerce, U. S. Tariff Commission, U. S. Treasury Department, National Fertilizer Association, U. S. Bureau of Mines; W. P. B.

	Methanol ¹ (in thousands of proof gals.)	Sulfuric acid (in short tons)	Ethyl alcohol (in thousands of proof gals.)	Sulfur (in long tons)	Explosives ² (in thousands of pounds)	Fertilizers (in thousands of short tons)	Paint, varnish, lacquer and fillers (in thousands of dollars)	Nitrocellulose materials (in thousands of pounds)
1929.....	12,408 ⁵	2,262,780	206,664	2,357,640	484,596	8,011	434,820	.....
1932 ⁴	10,116	952,584	128,820	929,556	227,508	4,384	202,920	10,096
1937.....	37,560	2,212,212	215,436	2,677,176	387,804	8,226	402,132	14,851
1939.....	38,916	2,051,532	221,628	2,088,384	372,468	7,707	379,272	13,373
1940.....	50,268	2,435,724	263,184	2,725,764	406,668	8,249	396,624	11,915
1941.....	61,872	6,820,080	367,680	3,131,328	460,080	9,183	554,196	16,500
1943.....	69,804	8,604,576	5,388	2,538,792	451,776	11,463	568,620	.....
1944.....	75,468	9,261,972	7,176	3,218,160	444,216	12,055	618,324	.....
1945.....	77,532	9,552,771	433,122	3,753,188	440,148	13,202	643,424	14,114 ⁶
1946.....	76,944	9,305,145	244,628	3,859,642	515,772	14,874	797,090	18,159
1947.....	84,707	10,574,941	315,671	4,441,214	606,870	15,039	1,038,795	12,887

¹Crude and synthetic. ²Shipments. ³Consumption. ⁴Data for plastic materials is for 1933. ⁵1930. ⁶Data discontinued June, 1942 until March, 1945.

Wood Pulp, Paper and Paperboard, and Lumber Production

Source: U. S. Bureau of the Census and National Lumber Manufacturers Assn.

Year	Wood pulp (in thousands of short tons)	Paper and paperboard (in thousands of short tons)	Lumber (in millions of board feet)
1919.....	3,518	6,098	34,552
1929.....	4,863	11,140	36,886
1932.....	3,760	7,998	10,824
1939.....	6,993	13,510	24,972
1940*.....	8,695	14,484	28,932
1941.....	10,011	17,934	33,480
1942.....	10,264	17,084	36,336
1943.....	9,060	17,036	34,284
1944.....	9,446	17,183	32,940
1945.....	9,471	17,374	27,564
1946.....	9,904	19,178	29,922
1947.....	13,149	23,400	36,635†

*Coverage for wood pulp increased in 1940 and for paper and paperboard in 1941. †Preliminary.

Number of Houses Built*

Source: U. S. Bureau of Labor Statistics, National Bureau of Economic Research.

Year	Nonfarm houses	Year	Nonfarm houses
1919.....	330,000	1941.....	715,000
1920.....	247,000	1942.....	497,000
1922.....	716,000	1943.....	351,000
1925.....	937,000	1944.....	141,800
1929.....	509,000	1945.....	225,000
1933.....	93,000	1946.....	670,500
1939.....	515,000	1947.....	849,000
1940.....	603,000	1948†.....	42,640

*Data represents new dwelling units started. †First 4 months, preliminary.

Commercial production of petroleum was first recorded in Rumania in 1857. It was first produced in the United States in 1859.—*Encyc. Brit.*

Consumer Durable Goods Output

Source: Electrical Merchandising, Radio and Television Retailing, and Automobile Manufacturers Association.

Year	Electric clothes washers		Electric irons		Electric ranges		Electric vacuum cleaners		Electric refrigerators		Home radio sets		Passenger cars	
	Number sold, in thousands	Average retail price	Number sold, in thousands	Average retail price	Number sold, in thousands	Average retail price	Number sold, in thousands	Average retail price	Number sold, in thousands	Average retail price	Number sold, in thousands	Average retail price	Factory sales, in thousands	Average factory price
1900.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	\$1,169
1910.....	3 ¹	\$75 ¹	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	181	1,190
1915.....	13 ²	80 ²	.....	.....	.....	.....	370 ⁴	\$30 ⁴	.....	.....	.....	.....	896	643
1920.....	600	120	.....	.....	40	.....	1,024	50	5 ⁶	\$550 ⁶	100 ⁷	\$50 ⁷	1,906	949
1925.....	736	141	2,750	\$5.81	85	\$176	1,056	62	75	425	2,000	83	3,735	658
1929.....	956	113	.....	.....	173	165	1,253	50	778	292	4,428	136	4,587	621
1932.....	570	59	.....	.....	60	150	447	40	798	195	3,000	47	1,135	545
1937.....	1,465	72	4,157	3.87	405	134	1,210	56	2,310	171	8,065	56	3,916	583
1939.....	1,329	69	4,993	3.60	335	147	1,085	58	1,900	169	10,500	34	2,867	634
1940.....	1,455	72	5,171	3.65	450	140	1,341	55	2,600	152	11,800	38	3,692	656
1941.....	1,892	79	5,585	3.78	728	142	1,670	56	3,500	155	13,000	35	3,744	699
1942.....	449	91	1,145	4.34	225	.....	580	61	520	.....	4,400	35	221	786
1945.....	251 ³	.....	1,687	.....	74	.....	258 ⁵	.....	264	.....	500	40	75	.....
1946.....	2,070	112	9,600	8.64	577	186	2,290	68	2,100	207	14,000	50	2,149	.....
1947.....	3,573	159	9,400	10.64	1,200	230	3,801 ⁵	76	3,400	240	17,000	67	3,558	.....
1948 ^a	1,225	.....	1,283	.....	339	.....	971	.....	943	.....	4,352	.....	1,238 ^b	.....

¹1909. ²1914. ³Includes gas engine washers. ⁴1918. ⁵Includes hand cleaners. ⁶1921. ⁷1922. ^aFirst quarter. ^bFirst 4 months.

New Construction Activity, by Type

(in millions of dollars)

Source: U. S. Department of Commerce and U. S. Department of Labor.

Activity	1929	1933	1940	1945	1946	1947	1948 ^a
Total new construction activity.....	9,913	2,223	6,807	4,808	10,458	13,977	7,684
New private construction activity.....	7,522	1,005	4,199	2,716	8,253	10,893	6,064
Residential (nonfarm).....	2,797	278	2,355	684	3,183	5,260	3,100
Nonresidential building, except farm and public utility.....	2,822	404	1,028	1,014	3,346	3,131	1,651
Industrial.....	949	176	442	642	1,702	1,702	713
Commercial ²	1,296	135	365	210	1,110	835	559
Institutional ³	350	43	134	88	268	389	238
Other ⁴	227	50	87	74	279	205	141
Public utility.....	1,624	254	580	827	1,374	2,052	1,113
Railroad.....	510	94	167	264	258	318	149
Telephone and telegraph.....	354	45	122	117	305	510	312
Other public utility.....	760	115	291	446	811	1,224	652
Farm construction.....	279	69	236	191	350	450	200
Residential.....	147	43	127	116	212	250	...
Nonresidential.....	132	26	109	75	138	200	...
New public construction activity.....	2,391	1,218	2,608	2,092	2,205	3,084	1,620
Residential.....	...	...	200	71	369	182	37
Nonresidential building.....	622	193	519	652	325	505	398
Industrial.....	...	2	164	470	84	25	9
Institutional ⁵	462	86	182	144	186	356	289
Public administration.....	103	89	96	15	16	41	100
Other ⁶	57	16	77	23	39	83	...
Military and Naval.....	19	36	385	690	188	204	78
Highway.....	1,248	675	875	386	772	1,233	558
Sewer and water.....	253	81	194	97	194	331	202
Conservation and development.....	86	168	310	130	240	396	233
All other ⁷	163	65	125	66	117	233	114

¹First 6 months. ²Warehouses, office and loft buildings; stores, restaurants, and garages.

³Religious, educational, and hospital and other institutional.

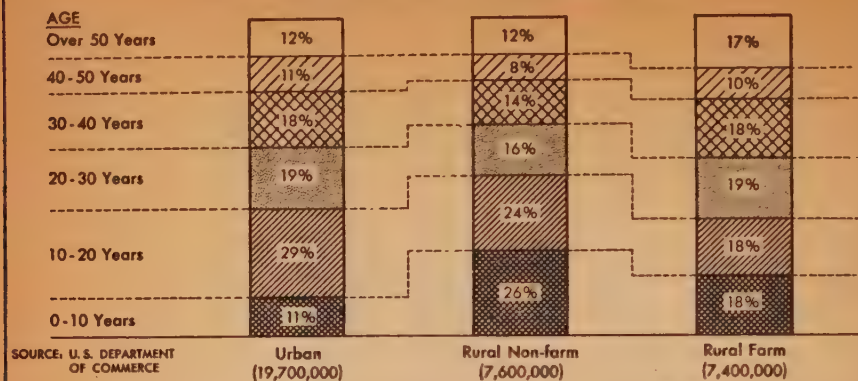
⁴Social and recreational, and miscellaneous.

⁵Educational, and hospital and other institutional.

⁶Commercial, social and recreational, hotels and miscellaneous.

⁷Miscellaneous public service enterprises and all Federal not included elsewhere.

AGE OF AMERICAN HOMES ON APRIL 1, 1940



WHAT FARMERS PRODUCE

The United States is universally recognized as the industrial giant of the world. Less well known is the fact that it is also by far the leading nation in agricultural output.

There is every reason to believe that this substantial margin of leadership will continue, even expand. For a technological and scientific revolution is taking place in agriculture which may well be fully as important—and as dislocating—as the industrial revolution of the 18th and 19th centuries. This revolution on the farm involves the greater use of more efficient machinery, the better application of chemical fertilizers and insecticides, the introduction of greatly improved strains of seed, and the beginnings of the new industry of “chemical farming.”

A foretaste of this technological progress took place during World War II. High costs of keeping working stock and high farm wages made farmers anxious to mechanize their farms, and with war-increased incomes they could afford it. Thanks to mechanization and a ready market here and abroad, farm production was steadily above prewar levels throughout the war and postwar periods. This was accomplished even though farm population declined substantially.

Although at present we welcome this record farm production as necessary to our plans for helping to feed the world, it may someday cause us headaches. When other countries up their agricultural output and need less from us, we may again be faced with our old problem of farm surpluses.

Population, Farms, and Farm Property

Source: U. S. Bureau of the Census.

Item	1850	1910	1920	1925	1930	1940	1945
Farm population (thousands).....			31,614	*	30,445	30,546	26,220†
Number of farms (thousands).....	1,449	6,361	6,448	6,371	6,288	6,096	5,859
All land in farms (million acres).....	293	878	955	924	986	1,060	1,142
Average acreage per farm.....	202.6	138.1	148.2	145.1	156.9	174.0	194.8
Value of farm property (millions of dollars)	3,967	40,837	77,923	57,017	56,975	41,254	60,008
Land.....		28,475	54,829	37,721	34,929	23,236	46,389
Buildings.....		6,325	11,486	11,746	12,949	10,405	
Implements and machinery.....	151	1,265	3,594	2,691	3,301	3,060	
Livestock.....	544	4,771	8,012	4,858	5,794	4,526	8,472
Total population (thousands).....	23,191	91,972	105,710	114,035	122,775	131,669	125,150‡
Urban.....		42,166	54,304	61,451	68,954	74,423	74,570
Rural.....		49,806	51,406	52,584	53,820	57,245	50,580

*Data are not strictly comparable with figures for other years.

†1944.

‡Excluding armed services.

§Excludes automobiles included in earlier years.

Production of Agricultural Commodities, by Kind

Year	Sugar						
	Corn, 1,000 bushels	Wheat, 1,000 bushels	Rice (rough) 1,000 bushels	Beet (chiefly refined) 1,000 pounds	Cane (chiefly raw) 1,000 pounds	Cotton 1,000 bales of 500 lbs.	Tobacco, 1,000 pounds
1900.....	2,661,978	599,315	9,793	172,164	623,772	10,124	851,980
1905.....	2,954,148	706,026	16,038	625,842	781,204	10,576	938,865
1910.....	2,852,794	625,476	24,731	1,020,344	724,000	11,609	1,142,320
1915.....	2,829,044	1,008,637	26,107	1,748,000	282,000	11,172	1,157,425
1920.....	3,070,604	843,277	51,648	2,178,000	360,000	13,429	1,509,212
1925.....	2,798,367	668,700	33,036	1,826,000	284,000	16,105	1,376,008
1929.....	2,515,937	824,183	39,534	2,036,000	436,000	14,825	1,532,676
1934.....	1,448,920	526,052	39,047	2,320,000	534,000	9,636	1,084,589
1939.....	2,580,912	741,180	54,062	3,286,000	1,008,000	11,817	1,880,793
1941.....	2,675,790	943,127	51,323	3,176,000	838,000	10,744	1,262,049
1943.....	3,034,354	841,023	64,843	1,996,000	996,000	11,427	1,406,196
1944.....	3,203,310	1,092,177	68,161	2,112,000	874,000	12,230	1,956,022
1945.....	2,880,933	1,108,224	68,150	2,556,000	950,000	9,015	1,993,837
1946.....	3,250,000	1,153,000	72,216	3,046,000	850,000	8,640	2,310,000
1947.....	2,400,952	1,364,919*	79,345*	3,664,000*	752,000*	11,552	2,107,763

*Preliminary.

Domestic Animals on Farms, Number and Value

January 1:	Number (thousands)							Value of all animals except chickens and turkeys (millions of dollars)
	Horses	Mules	Dairy cows	Sheep	Swine	Chickens	Turkeys	
1940.....	10,444	4,034	24,940	52,107	61,165	438,288	8,569	4,815
1941.....	10,193	3,911	25,453	53,920	54,353	422,841	7,193	4,991
1942.....	9,873	3,782	26,313	56,213	60,607	476,935	7,485	6,596
1943.....	9,605	3,626	27,138	55,150	73,831	542,047	6,600	8,981
1944.....	9,192	3,421	27,704	50,782	83,741	582,197	7,429	8,901
1945.....	8,715	3,235	27,770	46,520	59,331	516,497	7,203	8,280
1946.....	8,053	3,010	26,695	42,436	61,301	530,203	8,493	9,022
1947.....	7,249	2,773	26,098	37,818	56,921	474,441	6,650	11,252
1948.....	6,607	2,544	25,165	35,332	55,038	462,976	4,507	12,752

Agricultural
Cooperatives

Source: Farm Credit Administration.

Market- ing season	Number	Estimated membership (thousands)	Business (in millions of dollars)
1915.....	5,424	651	636
1925.....	10,803	2,700	2,400
1929.....	12,000	3,100	2,500
1930.....	11,950	3,000	2,400
1931.....	11,900	3,200	1,925
1932.....	11,000	3,000	1,340
1933.....	10,900	3,156	1,365
1934.....	10,700	3,280	1,530
1935.....	10,500	3,660	1,840
1936.....	10,743	3,270	2,196
1937.....	10,900	3,400	2,400
1938.....	10,700	3,300	2,100
1939.....	10,700	3,200	2,087
1940.....	10,600	3,400	2,280
1941.....	10,550	3,600	2,840
1942.....	10,450	3,850	3,780
1943.....	10,300	4,390	5,160
1944.....	10,150	4,505	5,645
1945-46..	10,150	5,010	6,070
1946-47..	10,125	5,436	7,116

Sources: U. S. Department of Agriculture.

Civilian Consumption of Principal Foods
(in pounds per capita)

Source: U. S. Bureau of Agri. Economics.

Foods	1935-39 avg.	1946	1947
Red meats.....	125.6	153.7	155.2
Poultry meats.....	20.5	30.0	27.9
Eggs*.....	298	374	380
Fluid milk and cream..	340	421	401
Cheese.....	5.5	6.9	7.0
Butter.....	16.7	10.3	11.2
Fats and oilst.....	31.9	32.0	33.7
Fresh fruits.....	137.7	140.6	146.0
Processed fruits.....	25.4	45.7	42.2
Fresh vegetables.....	235	271	251
Processed vegg. †.....	31.5	48.3	43.1
Potatoes, sweetpots...	152.4	143.3	141.1
Sugar.....	96.5	74.7	95.9
Corn products.....	37.5	38.4	41.1
Wheat flour.....	153.1	153.4	143.8
Coffee.....	14.0	20.0	17.4
Tea.....	.67	.53	.57
Cocoa.....	4.4	4.1	4.1

*Number, not pounds. †Excludes butter. ‡Pack year.

Agricultural Output by States, 1947 Crops

(in thousands of bushels; except cotton lint in thousands of 500 pounds gross weight bales, and tobacco in thousands of pounds) Source: U. S. Department of Agriculture.

State	Wheat	Corn	Oats	Barley	Cotton lint	Potatoes	Tobacco
Alabama.....	155	42,842	5,083	18	930	3,330	370
Arizona.....	588	352	336	3,848	234	1,740	.....
Arkansas.....	372	22,525	9,641	60	1,276	2,520	.....
California.....	12,028	1,984	4,860	43,260	772	37,260	.....
Colorado.....	59,952	13,984	6,900	16,940	...	19,240	.....
Connecticut.....	...	2,304	175	...	...	3,425	24,280
Delaware.....	1,407	4,550	160	366	...	336	.....
District of Columbia.....	...	...	...	...	...	...	...
Florida.....	...	8,638	600	...	12	3,272	27,036
Georgia.....	3,360	48,075	16,100	154	651	1,422	127,142
Idaho.....	37,935	1,125	7,568	11,625	...	28,600	.....
Illinois.....	28,524	343,492	117,005	656	...	1,056	.....
Indiana.....	35,811	191,135	34,320	520	...	3,750	10,220
Iowa.....	3,252	331,360	180,609	799	...	975	.....
Kansas.....	286,702	40,443	40,455	6,380	...	1,188	190
Kentucky.....	5,184	76,265	2,415	1,325	...	3,366	385,073
Louisiana.....	...	13,920	3,348	...	505	1,643	249
Maine.....	...	400	2,625	112	...	62,790	.....
Maryland.....	7,770	16,416	1,216	2,618	...	2,087	38,400
Massachusetts.....	...	1,702	252	...	...	3,178	11,462
Michigan.....	29,800	44,165	38,150	3,450	...	12,390	.....
Minnesota.....	19,715	191,041	163,332	25,838	...	14,520	720
Mississippi.....	460	37,191	12,480	46	1,569	1,460	.....
Missouri.....	24,438	98,441	30,107	1,449	311	2,120	4,680
Montana.....	64,325	2,988	10,478	17,940	...	1,820	.....
Nebraska.....	90,300	143,130	62,672	10,274	...	8,060	.....
Nevada.....	612	64	328	740	...	483	.....
New Hampshire.....	...	528	224	...	...	893	.....
New Jersey.....	1,875	7,740	1,000	396	...	13,140	.....
New Mexico.....	9,420	1,904	798	702	179	306	.....
New York.....	9,272	20,215	13,338	2,184	...	33,090	1,080
North Carolina.....	8,449	65,209	11,623	980	452	9,216	907,181
North Dakota.....	105,868	24,374	61,902	50,358	...	20,100	.....
Ohio.....	49,028	138,826	19,058	390	...	5,460	21,125
Oklahoma.....	104,734	22,896	33,276	2,160	330	1,035	.....
Oregon.....	21,615	1,107	10,132	11,147	...	10,140	.....
Pennsylvania.....	22,296	57,460	19,865	4,059	...	17,985	58,518
Rhode Island.....	...	352	33	...	...	1,512	.....
South Carolina.....	4,356	28,080	19,630	624	651	2,440	155,495
South Dakota.....	50,733	75,430	95,511	31,504	...	1,840	.....
Tennessee.....	5,190	63,481	6,095	1,617	520	2,880	140,500
Texas.....	124,270	48,592	31,248	2,520	3,431	4,536	.....
Utah.....	8,082	950	2,112	5,076	...	2,498	.....
Vermont.....	...	1,920	810	19	...	1,080	.....
Virginia.....	8,522	42,940	3,456	2,478	18	9,450	154,752
Washington.....	64,750	795	6,812	3,640	...	8,840	.....
West Virginia.....	1,763	12,546	1,910	236	...	3,375	3,360
Wisconsin.....	2,793	105,840	120,873	5,962	...	10,080	35,930
Wyoming.....	6,130	1,235	5,049	4,712	...	2,480	.....
Not shown separately.....	...	...	...	...	10	...	.....
Total.....	1,364,919	2,400,952	1,215,970	279,182	11,851	384,407	2,107,763

U. S. Farm Index

(1935-39=100)

Source: U. S. Department of Agriculture.

Year	Average annual farm employment	Farm output per worker	Farm output
1919.....	102	83	85
1929.....	103	94	97
1934.....	99	89	79
1941.....	95	120	114
1945.....	90	143	129
1946.....	92	146	134
1947.....	93	139	129

Farm Tenancy

Source: U. S. Bureau of the Census.

Year	Farms operated by tenants (in thousands)	Total farms	Tenancy as % of total
1880.....	1,025	4,009	25.6
1890.....	1,295	4,565	28.4
1900.....	2,025	5,737	35.3
1910.....	2,355	6,362	37.0
1920.....	2,455	6,448	38.1
1930.....	2,664	6,289	42.4
1940.....	2,361	6,097	38.7
1945.....	1,858	5,859	31.7

WHAT COMMERCE DISTRIBUTES

In a mass-production economy, distribution is a highly intricate process. This is reflected in the fact that more than half the consumer's dollar goes for distribution and less than half for production. (Distribution costs include those of such services as advertising and insurance as well as transportation and selling costs.)

Commerce, like industry and agriculture, has made new records in the last seven years. In the retail trade, the postwar shift in sales from non-durable to durable goods follows the pattern dictated by consumer demand. During the war the military importance of airplanes led many to prophesy that the air age was upon us. However, transportation statistics show that air freight is still suffering from growing pains. It will be some time before a substantial portion of our industrial output is transported by air.

Retail Sales by Kind-of-Business Groups

(in millions of dollars)

Source: U. S. Bureau of the Census.

Kind-of-Business Group	1929	1933	1939	1941	1944	1945	1946	1947	1948*
Durable goods stores.....	14,180	4,844	10,379	15,604	10,468	11,960	21,761	30,392	20,231
Automotive group.....	7,043	2,368	5,549	8,544	3,315	3,805	8,808	13,778	9,817
Motor vehicle dealers.....	6,444	2,142	5,025	7,794	2,465	2,741	7,145	12,100	8,801
Parts and accessories.....	599	226	524	750	850	1,064	1,663	1,678	1,016
Building materials and hardware group.....	3,846	1,342	2,735	3,862	3,717	4,271	6,750	9,092	6,142
Building materials.....	2,621	854	1,761	2,435	2,171	2,508	4,137	5,695	3,865
Farm implements.....	519	177	345	524	539	586	787	1,180	915
Hardware.....	706	311	629	903	1,007	1,177	1,826	2,217	1,360
Home furnishings group.....	2,755	959	1,733	2,611	2,454	2,813	4,860	6,213	3,686
Furniture and house furnishings.....	1,813	646	1,200	1,787	1,951	2,145	3,175	3,746	2,183
Household appliances and radios.....	942	313	533	824	503	668	1,685	2,467	1,502
Jewelry.....	536	175	362	587	982	1,071	1,343	1,309	585
Non-durable goods stores.....	34,279	19,673	31,663	39,886	59,105	64,684	79,026	87,936	55,222
Apparel group.....	4,241	1,930	3,259	4,157	6,869	7,685	8,981	9,413	5,196
Men's clothing and furnishings.....	1,358	542	840	1,096	1,618	1,806	2,227	2,414	1,273
Women's apparel and accessories.....	1,480	754	1,323	1,690	3,193	3,589	4,033	4,141	2,360
Family and other apparel.....	596	209	479	605	986	1,093	1,262	1,325	703
Shoes.....	807	425	617	766	1,072	1,197	1,459	1,533	859
Drug Stores.....	1,690	1,066	1,563	1,821	2,812	3,023	3,520	3,659	2,093
Eating and drinking places.....	2,125	1,430	3,520	4,796	9,351	10,809	12,362	12,485	7,180
Food group.....	10,967	6,776	10,165	12,576	18,540	19,727	25,005	29,584	18,265
Grocery and combination.....	7,353	5,004	7,722	9,604	14,062	14,863	19,144	23,164	14,391
Other food.....	3,614	1,772	2,443	2,972	4,478	4,864	5,861	6,420	3,874
Filling stations.....	1,787	1,532	2,822	3,454	2,603	3,016	4,065	5,193	3,615
General merchandise group.....	9,015	4,982	6,475	7,931	10,890	11,689	14,611	16,003	8,814
Department, including mail order.....	4,350	2,538	3,975	5,027	6,764	7,428	9,621	10,615	5,835
General, incl. gen. mdse., with food.....	2,710	1,176	922	991	1,388	1,417	1,676	1,858	1,083
Other general mdse. and dry goods.....	1,051	590	601	738	1,208	1,249	1,463	1,538	833
Variety.....	904	678	977	1,175	1,530	1,595	1,851	1,992	1,067
Other retail stores.....	4,454	1,957	3,859	5,151	8,040	8,735	10,482	11,599	7,060
Liquor.....	.....	17	586	767	1,485	1,688	1,912	1,874	982
Feed and farm supply.....	1,119	463	779	1,101	.....	.....	.....	.....	.....
Fuel and ice.....	1,013	623	1,014	1,260	.....	.....	.....	.....	.....
Book stores, news dealers, stationery.....	360	159	205	274	.....	.....	.....	.....	.....
Cigar stores.....	410	190	208	244	6,555	7,047	8,570	9,725	6,078
Florists.....	176	66	149	194	.....	.....	.....	.....	.....
Office equipment and supplies.....	324	112	208	346	.....	.....	.....	.....	.....
Other.....	1,052	327	710	965	.....	.....	.....	.....	.....
All retail stores.....	48,459	24,517	42,042	55,490	69,573	76,644	100,787	118,325	72,451

Chain Stores vs. Independent Stores

(in millions of dollars)

	1929	1933	1939	1941	1944	1945	1946	1947	1948*
Chain store & mail order.....	10,412	6,618	9,570	12,434	15,482	16,309	21,072	25,292	15,425
Independent.....	38,047	17,879	32,472	43,056	54,091	60,335	79,715	93,033	57,026
Total sales.....	48,459	24,517	42,042	55,490	69,573	76,644	100,787	118,325	72,451
Chains as percent of total.....	21.5	27.0	22.8	22.4	22.3	21.3	21.0	21.4	21.3

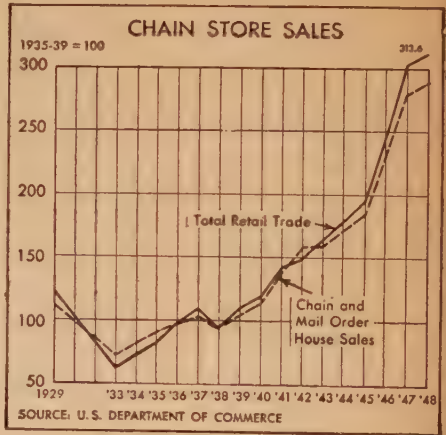
*First 5 months, not adjusted for seasonal variation.

Sales of Leading Retail Outlets

Source: Moody's Manual of Industrials.

Department Stores		1947 sales* (in thousands)	Mail Order Houses		1947 sales* (in thousands)
J. C. Penney Co.		\$ 775,873	Sears-Roebuck & Co.		1,981,536
Allied Stores Corp.		392,199	Montgomery Ward & Co.		1,158,675
May Department Stores Co.		330,332	Spiegel, Inc.		125,188
Federated Department Stores		304,721			
Gimbel Bros., Inc.		301,246			
R. H. Macy & Co., Inc.		285,083			
Marshall Field & Co.		211,403			
Variety Stores			Furniture Stores		
F. W. Woolworth Co.		593,359	Barker Bros. Corp.		30,006
S. S. Kresge Co.		270,586	W. & J. Sloane		24,815
W. T. Grant Co.		228,636	Reliable Stores Corp.		21,032
S. H. Kress & Co.		155,360	Spear & Co.		19,337
G. C. Murphy Co.		119,359	Sterchi Bros. Stores, Inc.		14,233
J. J. Newberry Co.		117,860	Sterling, Inc.		11,354
McCrory Stores Corp.		91,226			
Grocery Stores					
Atlantic & Pacific Tea Co.		1,908,979			
Safeway Stores, Inc.		1,117,065			
Kroger Co.		754,282			
American Stores Co.		388,614			
First National Stores, Inc.		256,507			
Drug Stores					
United-Rexall Drug, Inc.		186,664			
Walgreen Co.		154,929			
People's Drug Store, Inc.		46,019			
Shoe Stores					
Endicott Johnson Corp.		142,029			
Melville Shoe Co.		77,146			
Edison Bros. Stores, Inc.		70,939			
G. R. Kinney Co.		33,117			
Florsheim Shoe Co.		25,113			
Miles Shoes, Inc.		19,058			

*For accounting year ending in 1947.



Wholesale Sales (in millions of dollars)

Source: U. S. Department of Commerce.

Type of establishment	1929	1933	1941	1943	1944	1945	1946	1947
Service and limited function	30,343	12,950	34,244	38,307	40,525	43,024	56,521	66,221
Durable goods	7,700	2,489	12,223	9,543	10,001	10,622	16,580	22,306
Automotive	1,383	438	3,181	1,033	1,265	1,576	3,508	5,100
Lumber and building material	1,920	492	2,070	1,892	1,938	1,940	2,782	3,980
Elec. goods	917	290	1,438	1,000	1,075	1,284	2,210	3,682
Hardware	715	340	893	876	1,028	1,145	1,809	2,179
Housefurnishings	495	175	586	549	507	473	772	1,016
Jewelry and optical	380	105	426	488	480	493	679	625
Machinery and metals	1,890	649	3,629	3,705	3,708	3,711	4,820	5,724
Nondurable goods	22,643	10,461	22,021	28,764	30,524	32,402	39,941	43,915
Apparel	1,136	408	980	1,180	1,221	1,234	1,656	2,021
Beers, wines and liquors	21	130	1,685	2,224	2,778	3,248	3,674	3,469
Drugs and sundries	535	352	653	785	876	1,091	1,185	1,279
Dry goods	1,714	842	1,645	2,242	2,178	2,098	3,135	3,110
Food	8,600	4,743	7,829	9,935	10,422	11,089	14,136	15,761
Paper and its products	704	334	827	910	928	944	1,318	1,552
Tobacco products	859	526	1,293	1,556	1,560	1,655	2,191	2,346
All other	9,074	3,126	7,109	9,932	10,561	11,043	12,646	14,377
All establishments	37,814	16,550	42,957	51,957	54,063	57,323	73,653	87,646
Durable goods	7,827	2,548	12,416	9,724	10,190	10,809	16,844	22,637
Nondurable goods	29,987	14,002	30,541	42,233	43,873	46,514	56,809	65,009

Transportation Trends (1935-39=100)

Class	1929	1932	1939	1941	1943	1944	1945	1946	1947
Total.....	118	73	106	142	213	223	217	200	212
Commodity.....	116	70	107	147	216	208	199	182	204
Passenger.....	122	83	103	126	274	272	274	328	271
Air.....	20	31	142	259	424	581	821	...	...
Commodity.....	35	39	132	205	576	787	1019	663	805
Passenger.....	10	25	148	294	324	445	690	1181	1216
Railroads.....	140	74	104	145	240	247	231	...	...
Commodity.....	140	73	104	146	219	223	206	179	198
Passenger.....	141	76	103	133	399	433	419	296	209
Inter-city motor.....	62	68	112	165	225	228	226	...	...
Local transit.....	128	92	101	112	172	179	181	...	...
Oil and gas pipeline.....	58	55	110	129	192	251	255	...	...
Waterborne (domestic).....	87	58	113	124	59	68	77	...	...

Source: U. S. Department of Commerce.

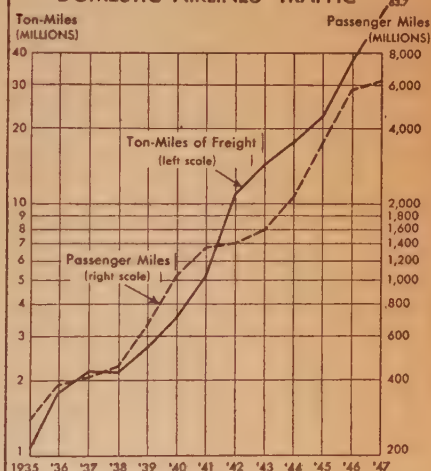
Monthly Average Railroad Carloadings (in thousands of cars)

Source: Association of American Railroads.

Year	Total*	Coal, coke & ore	Grain & products	Less-than-carload merchandise
1920...	3,760	1,095	154	751
1925...	4,269	962	192	1,099
1929...	4,402	1,001	200	1,100
1932...	2,348	482	138	756
1937...	3,139	807	149	705
1939...	2,826	676	162	653
1940...	3,030	793	153	640
1941...	3,524	913	169	670
1942...	3,568	1,008	181	465
1943...	3,535	1,001	222	423
1944...	3,674	1,043	213	459
1945...	3,492	955	228	461
1946...	3,445	882	208	528
1947...	3,708	1,039	227	506
1948†...	3,449	928	173	477

*Includes forest products, livestock & miscellaneous group not listed separately. †First five months.

DOMESTIC AIRLINES' TRAFFIC



Steam Railways

Source: Association of American Railroads and the Interstate Commerce Commission.

	1920	1930	1940	1945	1946	1947
v. first-track mileage operated (thousands).....	259,941	260,443	245,740	227,877	227,599	227,146
Passengers carried (thousands).....	1,269,913	707,987	456,088	891,128	790,130	703,280
Passenger revenue (thousand dollars).....	1,304,815	730,766	417,955	716,379	1,259,169	963,322
Average journey per passenger (miles).....	37.30	37.96	52.22	102.92	81.85	65.3
Total tons revenue freight carried (thousands)...	2,427,622	2,179,015	1,947,479	2,823,992	2,602,186	2,888,589
Freight revenue (thousand dollars).....	4,420,833	4,145,015	3,584,201	6,533,767	5,786,556	7,041,185
Operating revenues (thousand dollars).....	6,301,151	5,356,484	4,354,712	8,902,248	7,627,651	8,684,918
Operating expenses (thousand dollars).....	5,954,394	3,993,621	3,131,598	7,051,627	6,357,415	6,797,265
Net railways operating income (thousand dollars)	12,101	874,154	690,554	852,147	620,129	780,694
Net capitalization (million dollars).....	16,994	19,066	17,630	15,667	15,509	15,143
Average number of employees (all carriers).....	.....	1,571,559	1,091,692	1,419,505	1,359,263	1,351,961
Total compensation per year (thousand dollars)...	.....	.....	2,079,107	3,862,001	4,170,767	4,350,229
Roads under receivership and trusteeship.....	61	30	103	72	65	53
Miles of roads under rec. and trusteeship.....	16,290	9,486	75,270	39,714	34,385	22,894
Number of locomotives—Dec. 31 (thousands).....	68,942	60,189	44,333	43,530	42,841	41,657
Number of freight-train cars—Dec. 31 (thousands)...	2,388,424	2,322,267	1,684,171	1,784,674	1,767,162	1,758,144
Number of pass.-train cars—Dec. 31 (thousands)...	56,102	53,584	38,308	38,273	38,356	38,770

WHAT SERVICES CONTRIBUTE

Manufacturing and agriculture can grow steadily more efficient only because they take advantage of various types of business, professional and scientific services. For example, mass production would be impossible without modern accounting systems; and large-scale agriculture could hardly exist without scientific crop and weather services.

Personal services are the remaining stronghold of small, individual enterprise. More than 600,000 small businesses performed 66 percent of those services in 1939. The service industries are the only ones where small business produces as much as half the total output.

But there are big as well as small businesses among the service industries. Financing of the nation's business and much of its government is made possible by the highly organized financial services. Insurance is another field where big as well as small firms fill our steadily increasing demand for all forms of protection.

Through ownership of stocks, bonds, life insurance and savings accounts we all contribute and have a stake in this financing of our complex economic machinery. Contrary to the steady advance of almost all other indices, however, stock and bond yields to the investor have declined steadily throughout the war and have only recently begun to turn upward.

Number of Service Establishments and Places of Amusement, 1939

Source: U. S. Department of Commerce.

Kind of business	Number of establishments	Kind of business	Number of establishments
PERSONAL SERVICES:		REPAIR SERVICES:	
Barber shops.....	117,998	Automotive repairs and services.....	78,881
Barber and beauty shops.....	4,199	Armature rewinding shops.....	978
Baths and masseurs.....	1,600	Bicycle repair shops.....	1,601
Beauty parlors.....	83,071	Blacksmith shops.....	16,797
Cleaning and repair shops.....	52,516	Boat repair shops.....	464
Cleaning and dyeing plants.....	11,604	Electrical appliance repair.....	3,615
Cleaning and renovating hats.....	1,288	Jewelry repair.....	12,485
Costume rental agencies.....	417	Leather goods repair.....	2,168
Morticians' establishments.....	18,196	Locksmiths and gunsmiths.....	2,252
Fur repair and storage.....	2,180	Musical instrument repair.....	461
Laundries, all types.....	22,018	Piano and organ repair.....	521
Linen supply service.....	718	Radio repair.....	10,732
Photographic studios.....	10,957	Refrigerator repair.....	1,297
Rug cleaning services.....	1,012	Sewing machine repair.....	355
Shoe repair shops.....	50,115	Stove repair.....	365
Shoe shine parlors.....	7,968	Tool repair.....	1,451
Travel bureaus.....	741	Typewriter repair.....	618
		Upholstery, furniture.....	9,685
BUSINESS SERVICES:		CUSTOM INDUSTRIES:	
Adjustment and credit.....	2,576	Awning and tent.....	942
Advertising agencies.....	1,628	Bookbinding.....	314
Auctioneers.....	970	Bottling works.....	705
Billboard advertising.....	679	Cabinetmaking, woodworking.....	2,882
Blueprinting and photostat.....	500	Cider mills and presses.....	241
Booking agents' offices.....	520	Clothing contract work shops.....	518
Coin-operated machines.....	1,554	Custom slaughtering.....	268
Cotton compresses.....	315	Grist mills.....	9,217
Dental laboratories.....	2,080	Machine shops.....	3,117
Detective agencies.....	280	Mattress repair shops.....	1,386
Disinfecting, exterminating.....	952	Metal plating shops.....	379
Employment agencies.....	1,424	Neon sign manufacturing.....	359
Mailing services.....	1,433	Printing shops.....	13,570
Photo finishing laboratories.....	1,201	Sawmills and planing mills.....	12,775
Public stenographic service.....	1,329	Sewing establishments.....	808
Sign painting shops.....	5,391	Tinsmith shops.....	1,483
Window cleaning service.....	823	Tire retreading shops.....	863
Window display service.....	215	Welding shops.....	4,118
SERVICES ALLIED TO TRANSPORTATION:		MISCELLANEOUS SERVICES:	
Packing and crating.....	110	Circulating libraries.....	783
Stevedoring service.....	198	Interior decorators.....	461
Stockyard service.....	95	Landscape service.....	1,148
Warehousing.....	3,404	Livery stables.....	201
Weighing service.....	140	Taxidermists.....	363

AMUSEMENT PLACES:

Amusement devices.....	1,093
Amusement parks.....	245
Bands and orchestras.....	550
Bathing beaches (not municipal).....	344
Bicycle rentals.....	247
Billiard and pool parlors.....	12,998
Boat and canoe rental.....	1,382
Bowling alleys.....	4,646
Clubs, baseball.....	276
Dance halls, studios.....	2,191
Race tracks, dog, horse, auto.....	92
Riding academies.....	840

Hotels

Source: Horwath & Horwath.

Year	Percent of rooms occupied	Average sale per occupied room (\$)	Restaurant sales (1929 = 100)
1929	70	4.04	100
1933	51	2.88	49
1935	60	2.92	80
1937	66	3.24	95
1938	61	3.27	88
1939	62	3.31	90
1945	91	4.06	200
1946	93	4.23	230
1947	90	4.77	230
1948*	88	5.03	227

*First 5 months.

Advertising Media, 1947

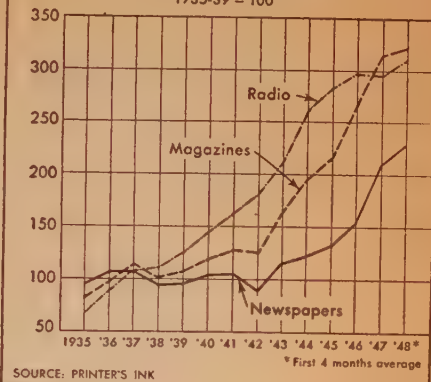
Source: Printers' Ink.

Medium	Volume (in millions of dollars)	% of total
Newspapers.....	1,222.0	31.5
Radio.....	530.6	13.7
Magazines.....	492.9	12.7
Direct mail.....	482.7	12.5
Business papers.....	196.0	5.0
Outdoor.....	121.4	3.1
Form papers.....	19.5	0.5
Unclassified.....	814.8	21.0
Total.....	3,879.8	100.0

Shooting galleries.....	324
Skating rinks, ice and roller.....	1,193
Sports and athletic fields.....	78
Sports promoters.....	110
Swimming pools (not municipal).....	668
Theaters, motion-picture.....	15,115
Theaters, other.....	231

ADVERTISING EXPENDITURES

1935-39 = 100

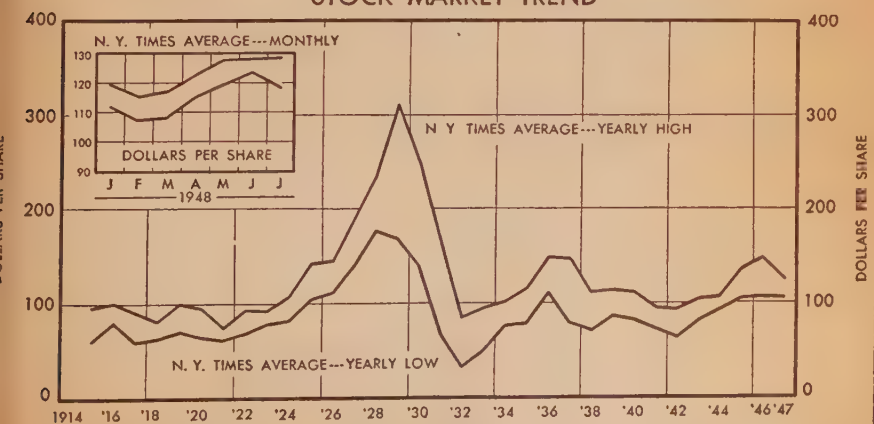


Cost of Advertising Facilities

Source: U. S. Dept. of Commerce.

Monthly average	Radio (in thousands of dollars)	Magazine (in thousands of dollars)
1933	2,626	8,155
1935	4,107	10,231
1939	6,926	12,587
1941	8,841	15,007
1945	15,896	25,531
1946	16,017	32,063
1947	15,910	37,340
1948 (first 6 mos.)	17,015	42,226

STOCK MARKET TREND



New York Stock Exchange Sales

Source: New York Stock Exchange.

Year	Stocks, millions of shares	Bonds, par val. (millions of dollars)			
		Total	Corpo-rate	U. S. govern-ment	State, munic-ipal, foreign
1919.....	317	3,809	622	2,901	286
1929.....	1,125	2,982	2,182	142	658
1932.....	425	2,967	1,642	570	755
1939.....	262	2,046	1,480	311	255
1941.....	171	2,112	1,929	20	163
1942.....	126	2,311	2,181	7	124
1943.....	279	3,255	3,130	4	120
1944.....	263	2,695	2,585	6	104
1945.....	378	2,262	*	8	*
1946.....	364	1,364	*	19	*
1947.....	254	1,075	*	3	*
1948†...	137	490	*	†	*

*Breakdown not available. †First 5 months.
†Less than 1.

 Stock Prices per Share*
 Dow-Jones & Co., Inc. Averages
 (in dollars)

Year	Total (65)	Industrials (30)	Public utilities (15)	Railroads (20)
1929.....	125.43	311.24	104.48	159.66
1932.....	26.82	64.57	26.89	27.46
1937.....	58.08	166.36	28.17	49.51
1939.....	48.01	142.66	24.43	30.01
1940.....	45.28	134.74	22.61	28.50
1941.....	41.22	121.82	18.02	28.36
1942.....	36.04	107.20	12.63	26.38
1943.....	46.39	134.81	19.82	33.71
1944.....	51.39	143.32	23.99	40.33
1945.....	63.72	169.81	32.15	56.56
1946.....	71.01	191.65	40.56	58.07
1947.....	63.31	177.57	35.06	48.14
1948†...	64.32	176.22	33.23	53.52

*Averages of daily closings.
†First 5 months.

Stock and Bond Yields—Percent

Year	Bonds							Stocks				
	U. S. Treas- ury (Treas- ury Dept.)*	Mun- icipal (Bond Buyer) (20)	Corporate (Moody's Inves- tors' Service)				Munic- ipal (Stand- ard and Poor's Corp.) (15)	Preferred (Standard and Poor's Corp.) (15)	Common (Moody's Inves- tors' Service)			
			Total	Indus- trial	Rail- road	Public utility			Total (200)†	Indus- trial (125)	Rail- road (25)	Publi- c utility (25)
1926.....		4.14	5.21	5.37	5.13	5.11	4.08	5.78	3.5	4.0	4.4	2.6
1929.....		4.31	5.21	5.31	5.18	5.14	4.27	5.12	7.4	7.3	6.3	8.0
1932.....		4.77	6.87	6.71	7.61	6.30	4.65	6.13	4.2	3.9	3.7	5.5
1939.....		2.82	3.77	3.30	4.53	3.48	2.76	4.17	6.2	6.3	6.5	6.6
1941.....		2.15	3.34	2.95	3.95	3.11	2.10	4.08	6.6	6.4	7.7	7.9
1942.....	2.46	2.25	3.34	2.96	3.96	3.11	2.36	4.31	6.6	6.4	7.7	7.9
1943.....	2.47	1.90	3.16	2.85	3.64	2.99	2.06	4.06	4.8	4.5	6.9	5.8
1944.....	2.48	1.64	3.05	2.80	3.39	2.96	1.86	3.99	4.7	4.6	6.7	5.4
1945.....	2.37	1.49	2.87	2.68	3.06	2.89	1.67	3.70	4.1	4.0	5.5	4.6
1946.....	2.19	1.51	2.74	2.60	2.91	2.71	1.64	3.53	3.9	3.7	5.5	4.2
1947.....	2.25	1.92	2.86	2.67	3.11	2.78	2.01	3.79	5.1	5.0	6.4	5.3
1948†.....	2.44	2.37	3.08	2.87	3.38	3.00	2.44	4.13	5.6	5.6	5.7	5.9

*Taxable, 15 years and over. †Includes 15 banks and 10 insurance stocks. ‡Average of first 5 months.
Note: Figures in parentheses represent number of issues.

 Federal Reserve System, All Member Banks, Principal Assets and Liabilities*
 (all money figures in millions of dollars)

Source: Federal Reserve Board.

	1925	1930	1935	1940	1945	1946	1947	1948†
Loans.....	21,996	23,870	12,175	15,321	22,775	26,696	32,628	34,081
U. S. Gov't obligations.....	3,728	4,125	12,268	15,823	78,338	63,042	57,914	54,571
Other security investments.....	5,160	6,864	5,541	5,982	6,070	6,625	7,304	7,551
Total deposits†.....	34,250	37,029	38,454	56,430	129,670	118,170	122,528	117,121
Demand deposits.....	19,124	18,796	21,056	33,829	91,820	78,920	81,785	77,691
Time deposits.....	10,557	13,012	10,041	12,178	24,210	27,190	28,340	28,731
Capital accounts.....	4,678	6,593	5,145	5,698	7,589	8,095	8,464	8,651
Number of banks.....	9,489	8,052	6,387	6,486	6,884	6,900	6,923	6,911

*End of year. †As of July 28. ‡Includes interbank deposits, domestic and foreign, and U. S. Government and Postal Savings deposits.

Bank Debits to Deposit Accounts (except interbank)*

(in millions of dollars)

Source: Board of Governors of Federal Reserve System.

1929.....	935,030	1939.....	389,677	1943.....	715,782	1946.....	944,811
1932.....	322,365	1941.....	491,649	1944.....	807,939	1947.....	1,005,568
1938.....	373,522	1942.....	553,392	1945.....	884,303	1948†.....	547,392

*Includes 141 leading cities.

†First 6 months.

Money and Interest Rates

(Percent per annum)

Source: Federal Reserve Board.

Year	Open market rate in New York City			Commercial loan rates		
	Prime commercial paper, 4 to 6 months*	Prime bankers' acceptances, 90 days*	Call loans, renewal rate†	New York City	7 other northern & eastern cities	11 southern & western cities
1929.....	5.85	5.03	7.61	5.76	5.82	5.93
1930.....	3.59	2.48	2.94	4.39	4.84	5.40
1931.....	2.64	1.57	1.74	3.82	4.26	4.90
1932.....	2.73	1.28	2.05	4.20	4.81	5.21
1933.....	1.73	.63	1.16	3.43	4.46	5.04
1934.....	1.02	.25	1.00	2.45	3.71	4.32
1935.....	.76	.13	.56	1.76	3.39	3.76
1937.....	.94	.43	1.00	1.73	2.88	3.25
1938.....	.81	.44	1.00	1.69	2.75	3.26
1939.....	.59	.44	1.00	2.07	2.87	3.51
1940.....	.56	.44	1.00	2.04	2.56	3.38
1941.....	.54	.44	1.00	1.97	2.55	3.19
1942.....	.66	.44	1.00	2.07	2.58	3.26
1943.....	.69	.44	1.00	2.30	2.80	3.13
1944.....	.73	.44	1.00	2.11	2.68	3.02
1945.....	.75	.44	1.00	1.99	2.51	2.73
1946.....	.81	.61	1.16	1.82	2.43	2.85
1947.....	1.03	.87	1.38	1.81	2.33	2.76
1948†.....	1.37	1.06	1.50	2.10	2.62	2.93

*Prevailing rate. †New York Stock Exchange; average of daily quotations. ‡First six months.

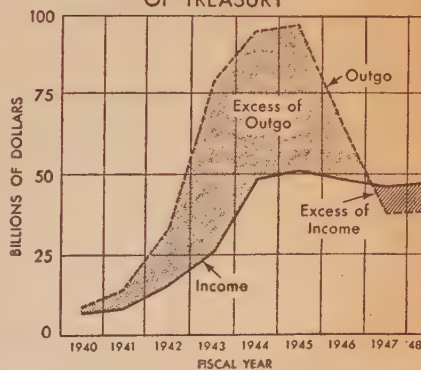
Assets and Liabilities of All Active Banks in the United States, December 31, 1947

(in millions of dollars except no. of banks)

Source: Federal Reserve Board.

	All banks	Commercial banks*	Mutual savings banks
Number of banks.....	14,714	14,181	533
Loans and discounts.....	42,999	38,055	4,944
Investments.....	91,909	78,213	13,696
Cash and balances with other banks.....	38,387	37,501	886
Total assets.....	175,073	155,359	19,724
Capital, surplus, and undivided profits.....	11,946	10,057	1,889
Total deposits.....	161,850	144,087	17,763
Demand.....	95,727	95,711	17
Time.....	53,089	35,344	17,745

*Comprises national banks, state commercial banks and private banks.

CASH INCOME AND OUTGO OF TREASURY

Insurance Premiums and Losses

(in thousands of dollars)

Source: *The Spectator*, Philadelphia, Pa., and National Board of Fire Underwriters.

Type	1939	1940	1942	1943	1944	1945	1946	1947
Casualty, surety, and miscellaneous companies								
Net premiums written...	1,191,838	1,274,255	1,651,031	1,703,797	1,525,586	1,631,649	2,011,262	2,591,065
Losses paid†.....	484,343	534,264	652,749	659,365	717,646	799,193	1,006,954	1,208,360
Fire and marine insurance business*								
Net premiums written...	907,003	1,129,016	1,396,282	1,334,491	1,421,904	1,555,935	2,042,435	2,453,421
Losses paid†.....	404,800	447,512	683,236	560,175	660,887	748,664	896,153	1,064,316
Total fire losses in United States.....	313,499	306,470	314,849	380,235	423,538	455,329	561,487	692,635

*U. S. and outlying territories and possessions.

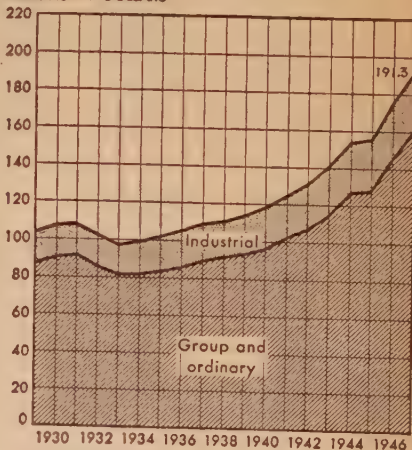
†Includes adjustment expenses.

Life Insurance—Financial Condition and Policy Accounts of U. S. Companies
 (in millions of dollars)
Source: *The Spectator*, Philadelphia, Pa.

Year	Assets (admitted) Dec. 31	Total income	Premium income	Payment to policyholders
1880...	453	81	.....	56
1890...	771	197	158	90
1900...	1,742	401	325	169
1910...	3,876	781	593	387
1920...	7,320	1,764	1,385	745
1929...	17,482	4,337	3,350	1,962
1932...	20,754	4,653	3,504	3,087
1939...	29,243	5,453	3,825	2,642
1940...	30,802	5,658	3,944	2,681
1942...	34,931	6,029	4,181	2,443
1943...	37,766	6,442	4,421	2,407
1944...	41,054	7,011	4,869	2,528
1945...	44,797	7,674	5,249	2,719
1946...	48,191	8,068	5,727	2,848
1947...	51,743	8,982	6,635	3,280

LIFE INSURANCE IN FORCE IN U. S.

BILLIONS OF DOLLARS

Source: *The Spectator Company***WHAT GOVERNMENT DOES AND COSTS**

Ever since the Civil War, the role of government in the American economy has been steadily expanding. While probably more citizens have opposed this trend in the United States than in any other major nation, it has persisted. In the last two decades, first depression, and then war and its dislocations, have sharply accelerated the momentum of such government intervention.

Although many Americans have disliked and distrusted big government, federal power has grown steadily since the Civil War. It seems inevitable that the government will continue to accept an increasingly important role in the economy.

Post-war budgets have been higher than those in any pre-war period. In the peace-time year of 1947, more than half the government's expenses were concerned with war. How to distribute the remaining billions among tax relief, debt reductions and foreign aid was a major problem in 1947.

Our federal government has become so large, and its activities so numerous, that we are likely to overlook the many services performed at the state and local government levels. Nevertheless, in 1946 state and local expenditures amounted to \$11 billion, or 24 percent of total government outlay.

The costs of running the more than 155,000 government units in the nation are immense. The variety of uses to which the billions of dollars raised in taxes or by borrowing is put is bewildering. This section spreads the central facts and figures before you.

Receipts and Expenditures of the National Government (in millions of dollars)

Source: U. S. Treasury Department.

Yearly average or year ended June 30	Ordinary expenditures							Ordinary receipts		Surplus (+) or deficit (-) ordinary receipts compared with expenditures chargeable against them	
	Total	Civil and miscel- laneous	War Depart- ment	Navy Depart- ment	Indians	Pensions	Postal defi- ciencies	Interest on the public debt	Income and profits taxes		
									Total		
1789-1800.....	6	1	1	1	..	..	..	3	6	...
1801-1810.....	9	2	2	2	..	..	..	4	13	...
1811-1820.....	24	3	11	5	..	1	..	5	21	...	
1821-1830.....	16	3	4	3	1	1	..	4	22	...	
1831-1840.....	24	6	8	5	3	3	..	..	30	...
1841-1850.....	34	8	13	8	1	2	..	2	29	...	
1851-1860.....	60	21	16	12	3	2	4	3	60	...	
1861-1865.....	684	26	548	65	3	5	2	35	161	28	
1866-1870.....	378	55	128	28	4	23	4	135	447	51	
1871-1875.....	287	69	40	23	8	30	6	111	337	8	
1876-1880.....	256	57	37	16	5	35	5	100	288	...	
1881-1885.....	258	68	43	16	7	58	2	64	367	...	
1886-1890.....	279	82	40	18	6	83	6	44	375	...	
1891-1895.....	364	97	50	29	11	140	7	29	353	...	
1896-1900.....	457	97	111	48	12	142	9	38	435	...	
1901-1905.....	536	130	133	86	12	140	6	28	559	...	
1910.....	694	172	190	123	19	161	8	21	676	21	
1915.....	761	201	202	142	22	164	7	23	698	80	
1917.....	1,978	1,144	378	240	31	160	..	25	1,124	360	
1918.....	12,698	6,144	4,870	1,279	31	181	2	190	3,665	2,314	
1919.....	18,523	6,628	9,009	2,002	35	222	..	619	5,152	3,019	
1920.....	6,482	2,771	1,622	736	41	213	..	1,020	6,695	3,945	
1929.....	3,848	1,471	426	365	34	230	95	678	4,033	2,331	
1933.....	4,325	2,015	435	349	23	235	117	689	2,080	746	
1937.....	8,281	5,651	628	557	37	396	42	866	5,029	2,163	
1939.....	8,765	5,894	695	673	47	417	41	941	5,165	2,189	
1940.....	9,127	5,651	907	891	38	429	41	1,041	5,387	2,125	
1941.....	12,775	4,851	3,939	2,313	34	433	30	1,111	7,607	3,470	
1942.....	32,491	7,750	14,326	8,580	32	431	18	1,260	12,799	7,960	
1943.....	78,182	12,475	42,526	20,888	25	442	15	1,808	22,282	16,094	
1944.....	93,744	14,651	49,438	26,538	31	495	+29	2,609	44,149	34,655	
1945.....	100,405	15,448	50,450	30,047	30	772	1	3,617	46,457	35,173	
1946.....	65,019	15,692	27,987	15,160	35	1,261	161	4,722	43,038	30,885	
1947.....	42,296	22,996	14,302	2	..	3	3	5,000	43,050	29,964	
1948.....	36,066	20,207	10,642	2	..	3	3	5,211	44,486	32,070	
1949 Budget Estimate ¹	42,203	24,763	12,140 ²	2	..	3	3	5,300	40,658	29,602	

¹Based on August, 1948 revision of budget document.

²National Defense expenditures combines War and Navy Departments.

³Surplus after adjustment for foreign economic cooperation trust fund.

included under civil and miscellaneous group.

spensions and postal deficiencies

¹Based on August, 1948 revision of budget document. ²National Defense expenditures combines War and Navy Departments. ³Surplus after adjustment for foreign economic cooperation trust fund. ⁴Surplus included under civil and miscellaneous group.

Summary of Internal Revenue Collections (in millions of dollars)

Source: U. S. Treasury Department.

Fiscal year ending	1937	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948
Total internal revenue collections.....	4,634	5,162	5,323	7,352	13,030	22,369	40,120	43,800	40,672	39,108	41,865
Total income and profits taxes.....	2,180	2,185	2,130	3,471	8,007	16,299	33,028	35,062	31,258	29,020	31,172
Individual.....	1,092	1,029	982	1,418	3,263	6,630	18,261	19,034	18,705	19,343	20,998
Corporation income and excess profits.....	1,057	1,123	1,121	2,016	4,687	9,585	14,629	15,883	12,462	9,621	10,157
Miscellaneous profits taxes.....	31	34	27	37	57	84	137	144	91	55	18
Total employment taxes.....	266	740	834	926	1,185	1,499	1,738	1,779	1,701	2,024	2,381
Social Security taxes:											
Old-age insurance.....	207	530	605	687	895	1,132	1,290	1,308	1,238	1,459	1,613
Unemployment insurance.....	58	101	106	101	120	156	183	186	179	186	209
Railroad retirement.....	..	109	122	138	170	211	265	285	284	380	560
Total miscellaneous internal revenue.....	2,189	2,237	2,360	2,955	3,838	4,571	5,353	6,960	7,713	8,064	8,311
Capital stock tax.....	137	127	133	167	282	329	381	372	352	2	2
Estate and gift taxes.....	306	361	360	407	433	447	511	643	677	779	899
Alcoholic beverage taxes.....	594	588	624	820	1,048	1,423	1,618	2,310	2,526	2,475	2,255
Tobacco taxes.....	552	580	608	698	781	924	988	932	1,166	1,238	1,300
Stamp taxes.....	70	41	39	39	42	45	51	66	88	80	79
Manufacturers' and retailers' excise taxes.....	450	397	447	617	852	670	729	1,207	1,415	1,940	2,119
Miscellaneous taxes.....	80	144	149	207	401	732	1,075	1,430	1,490	1,551	1,656

State Revenues and Expenditures (in millions of dollars)

Source: U. S. Bureau of the Census.

	1940	1947
Total revenues.....	5,145	8,534
Total expenditures*.....	5,421	8,290
Operation.....	1,745	3,314
Aid paid to local governments.....	1,627	2,605
Contributions to trust funds and state enterprises.....	900	1,073

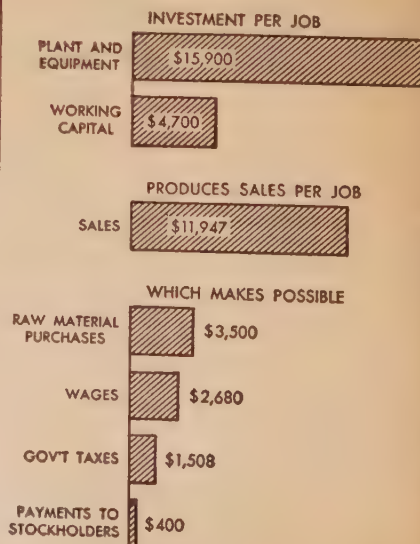
*Includes provision for debt retirement and interest payments.

Tax Revenues (in millions of dollars)

Source: The Conference Board; Bureau of the Census.

Fiscal year	Total	Federal	State	Local
1916.....	2,643	708	364	1,571
1920.....	9,165	5,689	636	2,840
1925.....	7,892	2,974	1,107	3,811
1930.....	10,277	3,479	1,780	5,018
1935.....	9,736	3,551	1,886	4,299
1940.....	12,907	4,910	3,313	4,684
1945.....	53,048	42,601	5,603	4,844
1946.....	48,808	37,681	6,014	5,113
1947.....	49,603	37,060	6,745	5,797

STORY OF A JOB*



* Monsanto Chemical Company, 1945

HOW WE WORK

Some of the most difficult problems we faced at the end of the war were concerned with labor. Many observers doubted that jobs could be found for ten million veterans. Yet this was accomplished quickly and successfully and postwar employment reached a peacetime high.

Women in industry numbered one-third of the total number of workers during the war. Since then the proportion of women dropped to about one-fourth—just a little higher than the prewar ratio.

After V-J Day, strikes increased rapidly as labor fought to increase real wages and adjust grievances accumulated during the war. But despite substantial increases in living costs, strikes hit a peak in 1946 and have been declining since.

Productivity and Unit Labor Cost in Selected Industries (1939=100)

Industry	Output per man hour						Unit labor cost			
	1919	1929	1933	1945	1946	1947	1919	1929	1933	1945
Manufacturing										
Boots and shoes.....	64.3	77.7	88.0	110.6	116.3	106.6	150.2	139.5	94.7	150.8
Bread and bakery products.....	* 89.8	90.8	126.1	111.7	106.9		*	98.8	88.5	114.4
Cane-sugar refining.....	50.8	79.8	95.7	92.2	82.3	86.4	137.6	89.0	79.3	146.7
Canning and preserving.....	53.8	68.7	98.1	120.8	113.8	109.7	141.6	114.7	78.8	152.7
Cement.....	43.2	71.7	84.4	89.4	108.7	110.8	158.8	111.9	85.3	146.9
Coke.....	50.4	93.8	72.8	*	97.0	105.2	143.1	75.2	77.1	*
Confectionery.....	* 53.8	73.1	117.8	117.4	109.3		*	150.6	110.7	135.4
Cotton goods.....	58.2	68.4	74.7	100.7	*	*	156.4	121.7	95.4	174.4
Fertilizers.....	51.3	74.1	83.0	113.2	109.7	112.5	187.2	115.5	82.8	160.8
Flour and other grain mill products.....	55.9	87.0	93.5	93.0	79.3	85.6	146.5	112.0	88.5	160.3
Ice cream.....	39.7	54.6	58.8	153.1	152.4	124.0	217.4	209.2	168.0	95.1
Leather.....	47.0	65.9	74.6	115.4	116.6	120.1	169.8	127.1	102.4	132.0
Lumber and timber products.....	79.0	82.4	86.1	*	*	*	147.6	122.1	85.5	*
Newspaper and periodical printing and publishing.....	43.8	77.3	75.3	88.7	*	*	131.3	122.4	108.6	140.4
Nonferrous metals: primary smelters and refineries.....	45.7	89.5	88.5	95.9	*	*	181.0	101.4	77.5	155.9
Paints and varnishes.....	53.0	71.7	70.8	120.3	94.0	84.5	125.3	111.5	103.9	115.5
Paper and pulp.....	45.0	74.5	87.4	95.2	*	*	156.7	119.3	82.3	152.9
Rayon and allied products.....	* 30.4	60.7	151.0	176.4	196.8	*	*	233.6	106.3	97.2
Slaughtering and meat packing.....	58.8	79.1	91.6	111.0	*	*	141.7	105.3	75.2	126.4
Tobacco products.....	42.1	61.8	74.1	118.7	116.5	117.2	175.4	125.6	106.8	135.5
Woolen and worsted goods.....	62.9	70.8	86.3	118.2	*	*	124.4	123.0	88.4	144.3
Mining										
Anthracite.....	*	*	79.3†	99.6	93.5	89.1	*	*	110.4†	134.5
Bituminous.....	*	*	82.4†	119.6	114.2	120.8	*	*	98.9†	132.3
Team railroad transportation.....	*	*	87.6†	139.5	129.0	135.0	*	*	103.7†	95.2
Electric light and power.....	42.6‡	53.4	67.3	181.4	160.7	166.6	108.5	138.5	113.9	71.6
Telephones.....	*	*	88.2†	99.6†	100.2	*	*	*	95.4†	114.2†
Telegraph.....	*	*	85.8†	105.5†	116.4	*	*	*	99.8†	130.0†

*Not available. †1935. ‡1944. §1917.

Source: U. S. Bureau of Labor Statistics.

Selected Occupation Groups, by Sex, 1948 (in thousands)

Source: U. S. Bureau of the Census.

Age of Persons in the Labor Force (in thousands)

Source: U. S. Department of Commerce.

Age	1940*		1948†	
	Male	Female	Male	Female
to 19.....	2,619	1,395	4,337	2,682
to 24.....	5,035	2,688	4,952	2,742
to 44.....	18,817	6,107	20,022	7,773
to 64.....	11,954	2,550	13,783	4,674
and over.....	1,859	275	2,346	535
Total, 14 and over	40,284	13,015	45,440	18,406

*Week of March 24.

†Week of July 4.

Occupation	Male	Female
Professional & semiprofessional workers.....	2,436	1,323
Farmers & farm managers.....	4,490	274
Proprietors, managers, & officials exc. farm.....	5,423	962
Clerical & kindred workers.....	3,041	4,701
Salesmen & saleswomen.....	2,312	1,440
Craftsmen, foremen, & kindred workers.....	8,014	189
Operatives & kindred workers.....	9,165	3,522
Domestic service workers.....	201	1,688
Service workers, exc. domestic.....	2,548	1,923
Farm laborers & foremen.....	2,672	1,513
Laborers, exc. farm & mine.....	3,687	92
Total employed.....	43,989	17,626

Occupations of Labor Force, 1940

(in thousands of persons)

Source: U. S. Department of Commerce.

All occupations	52,020
Professional and semiprofessional workers	3,558
Actors and actresses	19
Architects	22
Artists and art teachers	62
Authors, editors, and reporters	78
Chemists, assayers, and metallurgists	60
Clergymen	140
College presidents, professors, and instructors	76
Dentists	71
Engineers	262
Lawyers and judges	180
Musicians and music teachers	162
Osteopaths	6
Pharmacists	83
Physicians and surgeons	166
Social and welfare workers	75
Teachers, not elsewhere classified	1,076
Trained nurses and student nurses	371
Veterinarians	11
Librarians	39
Dancers, showmen, and athletes	54
Designers and draftsmen	112
Aviators	6
Chiropractors	11
Optometrists	10
Photographers	38
Radio and wireless operators	12
Religious workers	35
Surveyors	16
Lab. technicians & assistants	67
Farmers and farm managers	5,303
Proprietors, managers, and officials, excl. farms	3,854
Postmasters, and misc. gov't officials	240
Clerical, sales, and kindred workers	8,270
Bookkeepers, accountants, and cashiers	931
Stenographers, typists, and secretaries	1,175
Insurance agents and brokers	249
Traveling salesmen and sales agents	633
Craftsmen, foremen, and kindred workers	5,952
Carpenters	766

Electricians	227
Foremen, not elsewhere classified	576
Machinists, millwrights, and tool makers	662
Mechanics and repairmen	974
Painters, paperhangers, and glaziers	480
Operatives and kindred workers	9,477
Domestic service workers	2,345
Protective service workers	715
Guards & watchmen	236
Firemen, fire department	11
Policemen, sheriffs, and marshals	11
Service workers, except domestic and protective	3,116
Barbers, beauticians, and manicurists	440
Charwomen, janitors, and porters	631
Waiters and bartenders	735
Cooks, except family	336
Elevator operators	85
Practical nurses & midwives	105
Boarding house keepers	112
Farm laborers and foremen	3,531
Laborers, excl. farm and mine	4,612

Women Employed in the Labor Force

(in thousands)

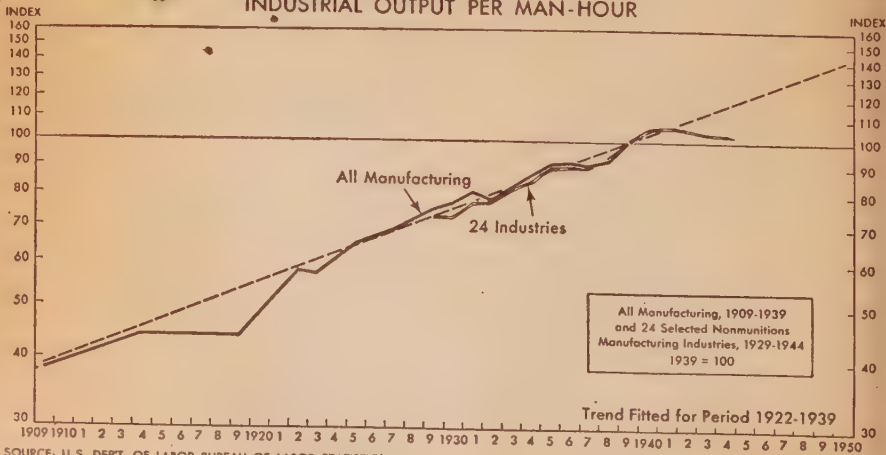
Source: U. S. Bureau of the Census.

Note: Data prior to 1940 refers to gainful workers. From 1940 on, data is as of July.

	Female workers	Total workers	Female workers as % of total
1900	5,114	28,283	18.1
1910	7,789	37,271	20.9
1920	8,430	41,236	20.4
1930	10,679	48,595	22.0
1940	11,330	48,010	23.6
1941	12,740	51,310	24.8
1942	14,630	54,340	26.9
1943	18,080	54,750	33.0
1944	18,590	54,000	34.4
1945	19,610	54,270	36.1
1946*	16,010	56,310	35.1
1947*	16,294	57,947	28.1
1948†	17,626	61,615	28.6

*As of December. †As of July.

INDUSTRIAL OUTPUT PER MAN-HOUR



Employment and Unemployment (in millions of persons)

Source: U. S. Bureau of Labor Statistics, U. S. Bureau of the Census, and U. S. Bureau of Agricultural Economics.

Note: Data prior to 1940 estimated by Research Institute of America from various Government sources.

Activity	1929	1932	1939	1941	1942	1943	1944	1945 ¹	1946	1947	1948 ²
Total employment.....	46.7	37.9	45.1	49.0	52.1	52.6	51.8	52.4	55.3	58.0	57.7
Non-agricultural employment.....	36.8	28.3	36.1	40.4	43.5	44.3	43.7	44.0	46.9	49.8	50.5
Manufacturing.....	10.5	6.8	10.1	13.0	15.1	17.4	17.1	15.3	14.5	15.9	16.1
Iron and steel and products ³	1.1	.6	1.0	1.4	1.6	1.8	1.7	1.6	1.4	1.6	1.6
Transportation equipment ³.....	.6	.3	.6	1.2	2.0	3.2	3.1	2.1	1.1	1.2	1.2
Textile—mill and apparel ³	1.8	1.3	1.9	2.2	2.2	2.2	2.1	2.0	2.2	2.3	2.4
Food and tobacco ³.....	.8	.7	.9	1.0	1.1	1.1	1.2	1.2	1.2	1.3	1.2
Other ⁴	6.2	3.9	5.7	7.2	8.2	9.1	9.0	8.4	8.5	9.5	9.7
Mining.....	1.1	.7	.8	.9	1.0	.9	.8	.8	.8	.9	.9
Construction.....	2.1	1.0	1.2	1.8	2.2	1.6	1.1	1.1	1.7	1.9	1.9
Transportation and public utilities.....	3.9	2.8	2.9	3.2	3.4	3.6	3.8	3.9	4.0	4.1	4.0
Trade.....	6.2	4.9	6.7	7.6	7.5	7.3	7.4	7.7	8.8	9.5	9.6
Financial, service and misc.....	4.2	3.5	4.6	5.0	5.1	5.2	5.2	5.3	6.0	6.3	6.4
Government.....	3.1	3.2	4.0	4.6	5.4	6.0	6.0	6.0	5.6	5.4	5.5
Other, self-employed, domestic.....	5.7	5.4	5.8	4.2	3.8	2.3	2.2	4.0	5.6	5.8	6.1
Agricultural employment.....	9.9	9.6	9.4	8.6	8.6	8.3	8.1	8.4	8.3	8.3	7.2
Unemployment.....	2.0	12.7	8.0	5.0	2.4	1.1	.8	1.1	2.3	2.1	2.2
Public works.....	.....	.....	3.0	1.9	.8	⁵	.....	.....	.....	.....	.....
Total civilian labor force.....	48.7	50.6	53.5	54.0	54.5	53.7	52.6	53.5	57.5	60.2	60.0
Armed forces.....	.3	.3	.4	1.6	3.9	8.8	11.3	11.4	3.3	1.4	1.2
Total labor force.....	49.0	50.9	53.9	55.6	58.4	62.5	63.9	64.9	60.8	61.6	61.2

¹New series, first 6 months estimated. ²Average of first five months. ³Includes production workers only.

⁴Includes production workers in industries not designated and non-production workers in all industries.

⁵Negligible.

Labor Turnover in Manufacturing Establishments (Monthly Average Rate Per 100 Employees)

Source: U. S. Bureau of Labor Statistics.

	1929*	1932	1933	1937	1939	1941	1943	1944	1945	1946	1947	1948†
Separation rate.....	5.7	3.3	5.4	3.6	4.1	5.4	7.5	6.1	6.3	6.7	5.1	4.3
Discharges.....	6.3	4.3	3.8	4.4	3.1	3.9	7.3	6.8	8.3	6.1	4.8	4.4
Layoffs.....	.8	.2	.2	.1	.3	.6	.6	.6	.6	.4	.4	.4
Quits.....	2.1	3.5	2.7	3.0	2.2	1.3	.6	.6	2.3	1.2	.9	1.2
Miscellaneous†.....	3.4	.7	.9	1.3	.8	2.0	5.2	5.1	5.1	4.3	3.4	2.7
	..	..	..	..	..	.4	.9	.5	.3	.2	.1	.1

*Average for 7 months, June–December. †First 4 months' average.

†Includes separations caused by death, permanent disability, retirement on pension, and extended leave. Beginning September 1940, workers leaving to enter the Army or Navy are included. Prior to January 1940, miscellaneous separations were combined with data for quits.

Disabling Injuries in Industry (in thousands)

Source: U. S. Bureau of Labor Statistics.

Industry	1936	1939	1941	1944	1945	1946	1947
Manufacturing.....	312	286	453	787	575	541	539
Trade—Wholesale and retail.....	133	201	297	274	296	333	361
Public utilities.....	14	21	21	19	20	25	28
Construction.....	284	405	500	100	112	151	152
Roads.....	38	35	48	92	94	76	72
Miscellaneous transportation.....	28	54	130	135	140	133	135
Mining and quarrying.....	103	91	97	92	82	84	93
Miscellaneous services.....	232	254	368	419	378	396	382
Agriculture.....	265	257	270	312	306	324	298
All industries.....	1,407	1,604	2,180	2,230	2,003	2,063	2,059

Strikes and Lockouts

Year	Strikes and lockouts	Workers involved	Man-days idle
	Number	Number (thousands)	Number (thousands)
1881.....	477	130	n.a.
1885.....	695	258	n.a.
1890.....	1,897	373	n.a.
1895.....	1,255	407	n.a.
1900.....	1,839	568	n.a.
1905.....	2,186	302	n.a.
1915.....	1,593	n.a.	n.a.
1917.....	4,450	1,227	n.a.
1918.....	3,353	1,240	n.a.
1919.....	3,630	4,160	n.a.
1920.....	3,411	1,463	n.a.
1921.....	2,385	1,099	n.a.
1922.....	1,112	1,613	n.a.
1923.....	1,553	757	n.a.
1924.....	1,249	655	n.a.
1925.....	1,301	428	n.a.
1926.....	1,035	330	n.a.
1927.....	707	330	26,219
1928.....	604	314	12,632
1929.....	921	289	5,352
1930.....	637	183	3,317
1931.....	810	342	6,893
1932.....	841	324	10,502
1933.....	1,695	1,168	16,872
1934.....	1,856	1,467	19,592
1935.....	2,014	1,117	15,456
1936.....	2,172	789	13,902
1937.....	4,740	1,861	28,425
1938.....	2,772	688	9,148
1939.....	2,613	1,171	17,812
1940.....	2,508	577	6,701
1941.....	4,288	2,363	23,048
1942.....	2,968	840	4,183
1943.....	3,752	1,981	13,501
1944.....	4,956	2,116	8,721
1945.....	4,750	3,467	38,025
1946.....	4,985	4,600	116,000
1947.....	3,693	2,170	34,600
1948*.....	1,460	1,150	21,800

n.a.=not available. *First six months, preliminary.

Why Strikes?

Major issues	Percentage of total strikes	
	1946	1947
Wages and hours.....	44.9	46.3
Union organization, wages and hours	18.3	15.1
Union organization.....	14.1	14.7
Recognition.....	8.0	9.9
Strengthening bargaining position	.8	.7
Closed or union shop.....	2.6	2.0
Discrimination.....	1.7	1.2
Other.....	1.0	.9
Other working conditions.....	17.6	18.8
Job security.....	8.4	9.5
Shop conditions and policies.....	7.1	7.4
Work load.....	1.8	1.0
Other.....	.3	.9
Interunion or intraunion matters...	4.9	4.3
Sympathy.....	1.1	1.1
Union rivalry or factionalism.....	2.5	1.6
Jurisdiction.....	1.0	1.6
Other.....	.2	.1
Not reported.....	.1	.8
All issues.....	100.0	100.0

Termination of Strikes in 1946

Methods of termination	Workers involved	
	Strikes (percent of total)	Workers involved (percent of total)
Agreement of parties reached:		
Directly.....	33.6	20.8
Assisted by impartial chairman....	.2	"
Assisted by government agencies....	53.3	74.3
Terminated without formal settlement	11.6	4.8
Employers discontinued business....	.7	"
Not reported.....	.6	.1

*Less than one-tenth of one percent.

Sources: U. S. Bureau of Labor Statistics

WHAT WE EARN AND SPEND—WHAT LIVING COSTS US

"Who gets the money?" is a favorite topic for political debate and more violent action. This section shows how much different groups in the economy—workers, farmers, professional persons, businessmen—receive of the total national income and how they spend it.

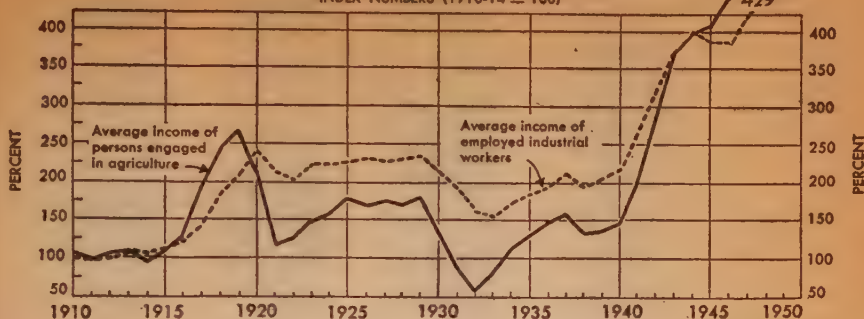
Over the long trend the American economy has been characterized by a steady rise in the real income of all groups. These increases have been particularly pronounced during the war years, as shown by the fact that 41 percent of all families have incomes of \$3,000 or more against 6.3 percent in 1935-36. Higher production made possible by greater capital investment per wage earner and greater production efficiency has enabled us to achieve this steady improvement. Thanks to steadily rising farm prices, farm income scored the most notable advances during recent years.

The increase in money incomes, however, does not tell the full story. Along with wages and other earnings, prices too have soared, as they always do in periods of war activity. While cost of living has gone up more than 70 percent since 1939, farm prices and raw material costs have more than doubled during the same period. Judging by previous postwar periods, however, there is strong hope that prices will gradually adjust though they will almost certainly never return to prewar levels.

The crucial thing, however, is how each of us fared on the basis of comparing the increase in our own income with the higher cost of living. In these terms, higher prices have only slowed down, not cancelled out our steady progress to greater economic well-being. The greatest relative increase in income went to the farmer, the under-dog of yesterday.

AVERAGE INCOME OF AGRICULTURAL AND INDUSTRIAL WORKERS, UNITED STATES, 1910-45

INDEX NUMBERS (1910-14 = 100)



Source: U. S. Dep't of Agriculture.

Average Earnings and Hours Worked Per Week in Nonmanufacturing Industries

Source: U. S. Department of Labor.

Industry	1935		1941		1945		1946		1947		1948*	
	Earn- ings	Hours Worked	Earn- ings	Hours Worked	Earn- ings	Hours Worked	Earn- ings	Hours Worked	Earn- ings	Hours Worked	Earn- ings	Hours Worked
Anthracite mining.....	\$25.98	31.7	\$27.41	28.1	\$48.98	39.2	\$57.15	38.3	\$62.69	37.7	\$65.30	36.9
Bituminous coal mining....	19.58	26.4	30.86	31.1	52.25	42.3	58.03	41.6	66.81	40.7	67.57	36.8
Metalliferous mining.....	23.33	38.7	33.28	41.7	45.86	44.0	46.86	40.5	54.71	41.9	58.09	42.4
Quarrying and nonmetallic mining.....	16.68	34.9	26.25	41.8	41.26	46.6	45.06	45.4	50.36	44.8	51.86	43.2
Telephone.....	28.32	.....	31.95	40.1	37.98	45.5	44.04	39.4	44.39	37.0	47.93	38.8
Telegraph.....	31.07	39.3	36.54	39.8	50.05	43.5	52.04	41.6	57.05	42.0	59.21	42.0
Electric light and power....	28.31	45.3	35.42	46.5	50.50	51.4	53.08	48.5	57.70	46.9	61.09	47.0
Street railways and busses..	26.93	41.3	32.32	41.0	44.07	42.7	48.06	41.8	52.38	41.2	55.29	41.0
Wholesale trade.....	19.96	41.8	21.94	42.5	28.31	40.3	32.55	40.5	36.70	40.2	38.09	39.7
Retail trade.....	13.57	47.8	16.09	45.6	24.53	44.2	26.95	43.9	29.64	44.5	31.08	44.2
Hotels (year-round).....	15.55	40.7	19.00	43.3	28.61	43.4	30.30	43.2	32.78	42.5	33.89	42.1
Laundries.....	18.27	41.7	21.70	43.6	32.94	43.3	35.36	43.0	36.98	41.8	37.83	41.4
Dyeing and cleaning.....	24.51	30.1	35.00	34.7	53.86	39.1	55.86	38.0	63.13	37.6	66.77	37.0
Private building construction.....												

*First 4 months average.

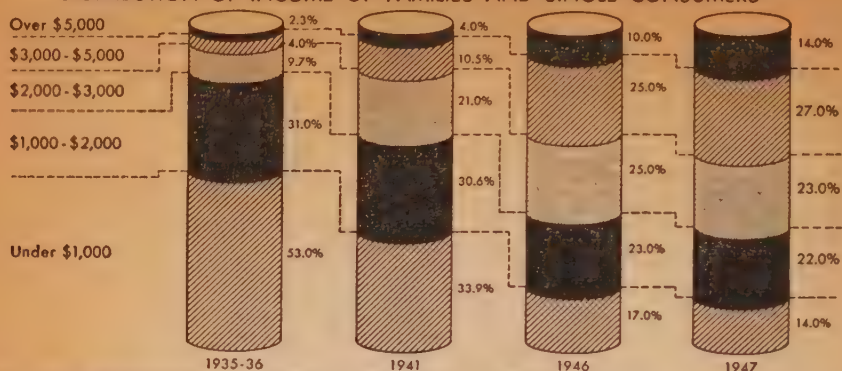
Farm Income—Estimated Receipts from Major Farm Marketings (in millions of dollars)

Source: U. S. Department of Agriculture.

Year	Cotton and cotton-seed	Tobacco	Bread grains	Oil-bearing crops	Feed grains and hay	Vegetables	Fruits and nuts	Meat animals	Dairy products	Poultry & eggs
1919.....	2,282	500	1,746	96	1,173	619	642	4,046	1,522	1,111
1929.....	1,512	279	790	85	706	710	620	3,016	1,838	1,188
1932.....	461	115	220	31	235	358	327	1,159	986	562
1939.....	627	271	475	112	477	589	443	2,272	1,346	768
1941.....	1,045	323	756	232	594	730	613	3,246	1,897	1,107
1942.....	1,244	474	944	468	815	1,086	826	4,791	2,336	1,652
1943.....	1,314	541	960	653	1,122	1,579	1,223	5,865	2,809	2,447
1944.....	1,497	689	1,328	588	1,194	1,567	1,504	5,720	2,949	2,306
1945.....	1,199	898	1,525	610	1,431	1,668	1,479	5,907	3,063	2,784
1946.....	1,462	955	1,826	711	1,629	1,883	1,796	7,045	3,736	2,693
1947.....	2,243	1,030	2,790	984	2,286	1,939	1,353	9,318	4,059	2,902
1948*.....	494	222	1,098	123	863	819	396	4,524	2,340	1,392

*First 6 months.

DISTRIBUTION OF INCOME OF FAMILIES AND SINGLE CONSUMERS



SOURCE: NATURAL RESOURCES COMMITTEE, U. S. BUREAU OF LABOR STATISTICS, AND FEDERAL RESERVE BOARD

Average Earnings and Hours Worked Per Week in Manufacturing Industries

Source: U. S. Department of Labor.

Industry	1939		1941		1945		1946		1947		1948†	
	Earn-ings	Hours worked	Earn-ings	Hours worked	Earn-ings	Hours worked	Earn-ings	Hours worked	Earn-ings	Hours worked	Earn-ings	Hours worked
All manufacturing*	\$23.86	37.7	\$29.58	40.6	\$44.41	43.4	\$43.74	40.4	\$49.25	40.3	\$51.89	40.3
Durable goods.....	26.50	38.0	34.04	42.1	49.07	44.1	46.49	40.2	52.46	40.6	55.07	40.7
Iron and steel products	27.52	37.2	34.66	41.6	49.10	44.6	47.36	39.6	54.09	40.3	57.04	40.4
Blast furnaces.....	29.88	35.3	37.18	39.0	52.44	44.1	48.25	37.4	55.92	38.9	59.49	39.2
Cast-iron pipe.....	21.33	36.4	27.71	41.3	41.57	45.7	42.49	41.4	49.42	42.0	48.68	39.7
Forgings.....	29.45	38.4	40.93	45.9	56.79	45.0	52.77	39.9	61.47	41.1	64.69	41.0
Hardware.....	23.13	38.9	28.20	43.1	44.93	45.7	43.94	41.8	49.45	41.5	52.69	42.1
Plumbers' supplies.....	25.80	38.2	29.93	40.1	46.65	44.5	45.71	40.9	52.04	40.6	55.92	40.8
Electrical machinery..	27.09	38.6	35.04	43.7	46.45	44.1	45.64	40.3	51.40	40.2	54.40	40.3
Machinery, except electrical.....	29.27	39.3	38.34	45.9	52.24	45.8	50.12	41.2	55.88	41.3	59.06	41.6
Transportation equipment, exc. autos....	30.51	38.9	40.30	44.4	56.10	43.7	52.34	39.5	55.90	39.9	59.34	40.2
Automobiles.....	32.91	35.4	41.25	39.6	51.99	41.3	50.22	37.6	57.44	38.9	59.58	38.8
Nonferrous metals and products.....	26.74	38.9	33.07	42.4	48.28	45.2	47.84	41.5	51.83	40.7	55.05	41.1
Lumber and timber products.....	19.06	39.0	22.22	39.7	33.80	42.0	36.53	40.9	43.35	42.2	44.93	42.0
Furniture and finished lumber.....	19.95	38.5	23.78	40.8	36.68	43.3	39.22	41.9	44.36	41.7	46.74	41.5
Stone, clay and glass..	23.94	37.6	27.44	39.0	40.00	43.1	42.32	40.7	48.19	40.5	50.83	40.3
Nondurable goods.....	21.78	37.4	24.92	38.9	38.30	42.4	41.62	40.5	45.87	40.1	44.48	39.9
Textile—mill products..	16.84	36.6	20.30	38.6	31.09	41.1	35.89	40.2	40.94	39.5	45.69	40.3
Cotton goods.....	14.26	36.7	18.13	39.1	28.20	41.3	33.10	39.9	38.82	39.6	43.58	40.4
Silk and rayon goods	15.78	36.5	19.00	37.8	30.82	41.4	36.09	41.2	42.34	41.0	48.08	41.9
Woolen and worsted goods.....	19.21	36.4	24.85	39.2	36.27	41.6	41.57	41.1	45.88	39.7	51.83	40.6
Apparel and other finished textiles....	18.17	34.5	20.64	35.7	31.67	36.9	35.62	36.9	37.30	36.3	39.46	36.6
Leather.....	19.13	36.2	22.95	38.3	35.05	41.1	37.27	39.0	40.73	38.7	41.96	38.0
Food.....	24.43	40.3	26.30	40.4	39.51	44.9	42.67	43.3	48.27	43.0	49.66	41.9
Tobacco.....	16.84	35.4	19.27	37.0	31.79	41.7	34.25	39.5	36.67	38.6	36.85	37.7
Paper.....	23.72	40.1	27.75	42.0	40.50	45.9	43.47	43.4	50.15	43.1	53.49	43.0
Printing and publishing	32.42	37.4	34.60	38.4	47.22	41.4	52.43	40.9	59.79	40.1	63.40	39.3
Chemicals.....	25.59	39.5	30.15	40.8	44.00	44.5	44.34	41.2	50.59	41.2	54.23	41.2
Petroleum and coal....	32.62	36.5	35.96	37.8	55.87	46.2	53.79	40.4	59.32	40.5	64.58	40.7
Rubber.....	27.84	36.9	32.49	39.5	49.54	44.0	50.32	40.2	55.97	39.7	54.68	38.5

*Average weekly earnings in 1919=\$23.29, 1929=\$26.40, 1932=\$17.86. Average hours worked per week in 1914=51.0, 1919=47.8, 1929=45.7, 1932=38.2.

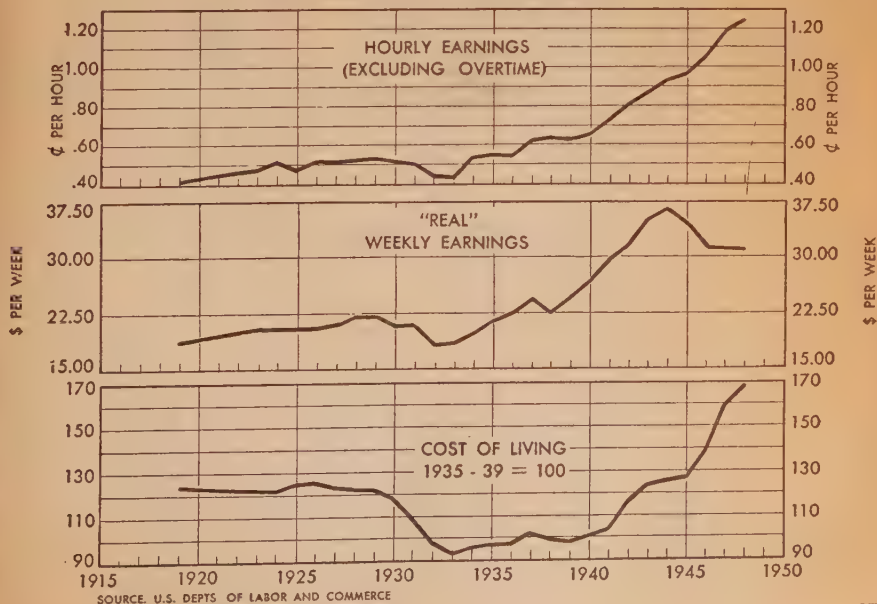
†Average of first four months.

National Income by Distributive Shares (in millions of dollars)

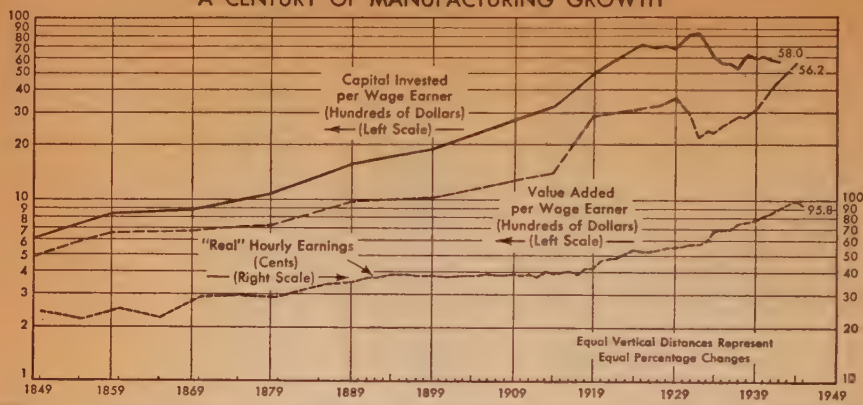
Source: U. S. Department of Commerce.

Type of share	1929	1933	1939	1941	1944	1945	1946	1947	% of total 1947
National income.....	87,355	39,584	72,532	103,834	182,407	181,731	179,289	202,500	100.0
Compensation of employees.....	50,786	29,330	47,820	64,280	121,119	122,908	117,294	127,501	62.9
Wages and salaries.....	50,165	28,825	45,745	61,708	116,882	117,556	111,710	122,159	60.3
Private.....	45,206	23,660	37,519	51,537	83,333	82,046	91,016	104,727	51.7
Military.....	312	270	398	1,862	20,706	22,476	7,761	3,876	1.9
Government civilian.....	4,647	4,895	7,828	8,309	12,843	13,034	12,933	13,556	6.7
Supplements to wages and salaries.....	621	505	2,075	2,572	4,237	5,352	5,584	5,342	2.6
Employer contributions for social insurance.....	101	133	1,540	1,983	2,935	3,803	3,951	3,520	1.7
Other labor income.....	520	372	535	589	1,302	1,549	1,633	1,822	.9
Income of unincorporated enterprises and inventory valuation adjustment.....	13,927	5,207	11,282	16,504	27,370	29,051	35,064	38,866	19.2
Business and professional.....	8,262	2,925	6,776	9,566	15,435	16,791	20,436	23,216	11.5
Income of unincorporated enterprises.....	8,120	3,450	6,942	10,210	15,486	16,853	21,815	24,384	12.0
Inventory valuation adjustment.....	142	-525	-166	-644	-51	-62	-1,379	-1,168	-.5
Farm.....	5,665	2,282	4,506	6,938	11,935	12,260	14,628	15,650	7.7
Rental income of persons.....	5,811	2,018	3,465	4,322	6,735	6,991	6,702	7,131	3.5
Corporate profits and inventory valuation adjustment.....	10,290	-1,981	5,753	14,615	24,039	19,776	16,812	24,709	12.2
Corporate profits before tax.....	9,818	162	6,467	17,232	24,333	20,389	21,840	29,784	14.7
Corporate profits tax liability.....	1,398	524	1,462	7,846	13,525	11,641	9,000	11,709	5.8
Corporate profits after tax.....	8,420	-362	5,005	9,386	10,808	8,748	12,840	18,075	8.9
Dividends.....	5,823	2,066	3,796	4,465	4,680	4,720	5,605	6,880	3.4
Undistributed profits.....	2,597	-2,428	1,209	4,921	6,128	4,028	7,235	11,195	5.5
Inventory valuation adjustment.....	472	-2,143	-714	-2,617	-294	-613	-5,028	-5,075	-2.5
Net Interest.....	6,541	5,010	4,212	4,113	3,144	3,005	3,417	4,293	2.1

WAGES AND LIVING COSTS



A CENTURY OF MANUFACTURING GROWTH



SOURCE: NATL INDUSTRIAL CONFERENCE BOARD

Consumer Spending

Source: U. S. Department of Commerce.

Group	(in millions of dollars)								1947 % of total
	1929	1932	1939	1941	1944	1945	1946	1947	
Food and tobacco.....	21,374	12,719	21,072	26,476	41,801	46,294	55,005	61,796	37.5
Clothing, accessories, and jewelry.....	11,018	5,973	8,299	10,483	18,013	20,110	22,098	22,606	13.7
Personal care.....	1,116	817	1,004	1,208	1,875	2,075	2,371	2,264	1.4
Housing.....	11,421	8,964	8,940	9,863	11,736	12,226	13,166	14,429	8.8
Household operation.....	10,509	6,675	9,461	11,724	13,453	14,824	18,646	21,973	13.3
Medical care and death expenses.....	3,620	2,575	3,386	3,961	5,576	5,941	6,724	7,415	4.5
Personal business.....	5,221	3,111	3,725	4,099	4,523	4,850	5,495	6,022	3.7
Transportation.....	7,496	3,924	6,250	8,241	5,585	6,420	11,798	15,467	9.3
Recreation.....	4,327	2,439	3,446	4,225	5,314	6,021	8,625	9,360	5.7
Private education and research.....	664	571	628	692	927	863	1,027	1,086	.7
Religious and welfare activities.....	1,196	973	938	1,014	1,594	1,619	1,610	1,615	1.0
Foreign travel and remittances—net.....	799	467	317	269	1,004	1,587	798	722	.4
Total consumer outlay.....	78,761	49,208	67,466	82,225	111,401	122,830	147,363	164,755	100.0

Income, Expenditures and Savings

(in billions of dollars)

Source: U. S. Department of Commerce.

Year	"Real" spendable income*	Spendable income	Consumer expenditures	Consumer savings
1929.....	67.3	82.5	78.8	3.7
1932.....	49.0	47.8	49.2	-1.4
1933.....	48.9	45.2	46.3	-1.2
1937.....	69.2	71.1	67.1	3.9
1939.....	70.6	70.2	67.5	2.7
1941.....	87.5	92.0	82.3	9.8
1942.....	99.7	116.2	90.8	25.4
1943.....	106.5	131.6	101.6	30.0
1944.....	116.0	145.6	111.4	34.2
1945.....	116.4	149.4	122.8	26.6
1946.....	114.3	159.2	147.4	11.8
1947.....	109.0	173.6	164.8	8.8
1948†.....	110.8	187.3	175.1	12.2

*Spendable income adjusted for changes in U. S. Bureau of Labor Statistics consumer price index.

†First half, at annual rate.

Who Pays the Taxes?

Source: Staff of the Joint Committee on Internal Revenue Taxation of the House of Representatives.

Note: Estimated individual income-tax liability under assumed income payments of \$209 billion for 1948.

Net income class (before personal exemption and credit for dependents)	Estimated tax liability per taxpayer under	
	1947 law	1948 law
Under \$1,000.....	\$ 61.49	\$ 29.40
\$1,000 to \$2,000.....	151.33	93.36
\$2,000 to \$3,000.....	236.09	170.53
\$3,000 to \$4,000.....	294.14	220.19
\$4,000 to \$5,000.....	491.00	399.97
\$5,000 to \$10,000.....	1,067.98	763.51
\$10,000 to \$25,000.....	3,965.01	3,071.32
\$25,000 to \$50,000.....	17,148.98	14,145.08
\$50,000 to \$100,000.....	40,506.92	34,423.54
\$100,000 and over.....	159,010.10	139,868.68
Total, All Classes.....	393.51	318.10

Farm Income—Estimated Cash Income and Government Payments

(in millions of dollars)

Year	Cash income from marketings		Government payments	Total cash income
	Crops	Livestock and livestock products		
1919	7,674	6,928	...	14,620
1929	5,125	6,171	...	11,303
1930	3,840	5,181	...	9,025
1931	2,536	3,835	...	6,372
1932	1,997	2,746	...	4,747
1933	2,473	2,841	131	5,445
1934	3,024	3,330	446	6,780
1935	2,978	4,108	573	7,659
1937	3,948	4,902	367	9,217
1938	3,190	4,496	482	8,168
1939	3,366	4,511	807	8,685
1940	3,470	4,870	766	9,106
1941	4,718	6,439	586	11,743
1942	6,387	8,987	697	16,071
1943	7,982	11,360	672	20,014
1944	9,039	11,199	810	21,048
1945	9,547	11,979	769	22,295
1946	11,165	13,699	772	25,636
1947	13,698	16,490	314	30,502
1948*	4,404	8,347	245	12,996

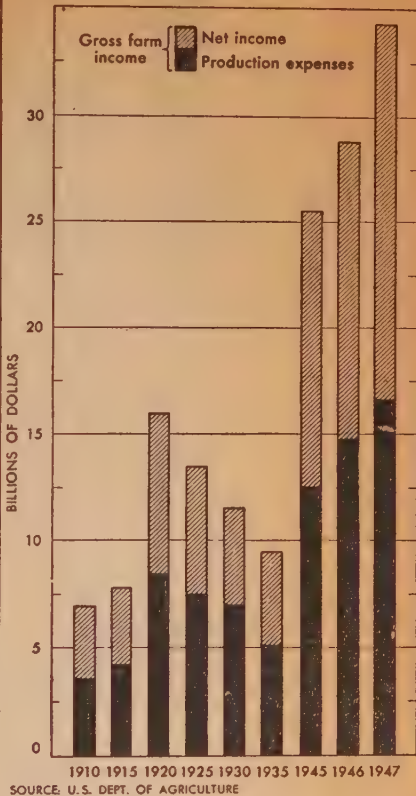
*Total for first 6 months, not adjusted for seasonal variation.

Monthly Farm Wage Rates

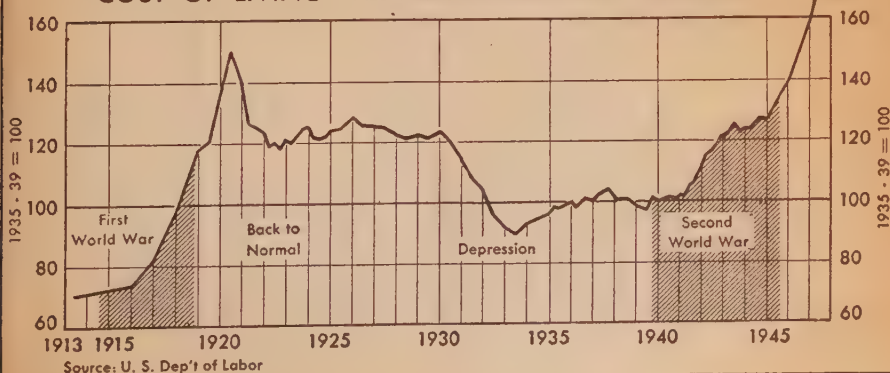
Year	Farm wage rates (average)		Year	Farm wage rates (average)	
	With board	Without board		With board	Without board
1910	\$21.22	\$28.08	1941	\$34.85	\$43.64
1920	51.73	65.40	1943	61.91	72.51
1922	32.75	43.33	1944	74.00	85.70
1929	40.61	51.22	1945	82.30	95.40
1933	18.07	25.67	1946	86.85	100.68
1937	28.00	36.32	1947	94.10	109.75
1939	27.39	35.82	1948*	99.00	115.67

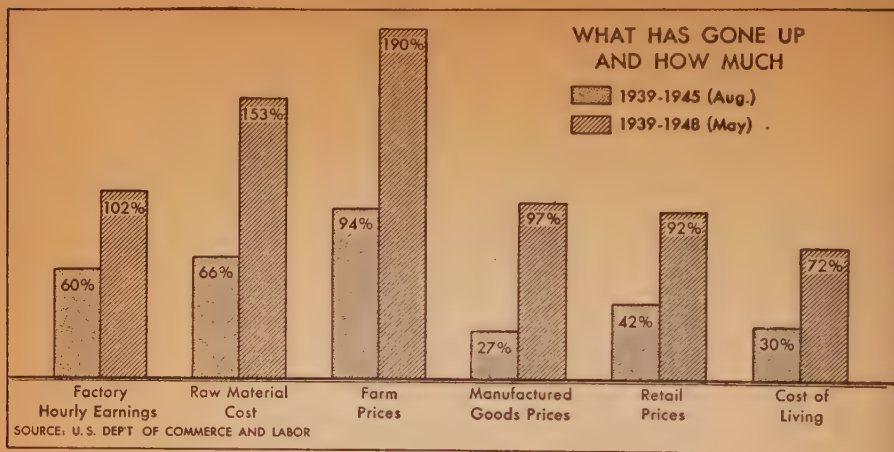
*Average of the first of Jan., April and July.

GROSS FARM INCOME: NET INCOME AND PRODUCTION EXPENSES OF FARM OPERATORS 1910 - 1947



COST OF LIVING (ALL ITEMS-AVERAGE FOR LARGE CITIES)





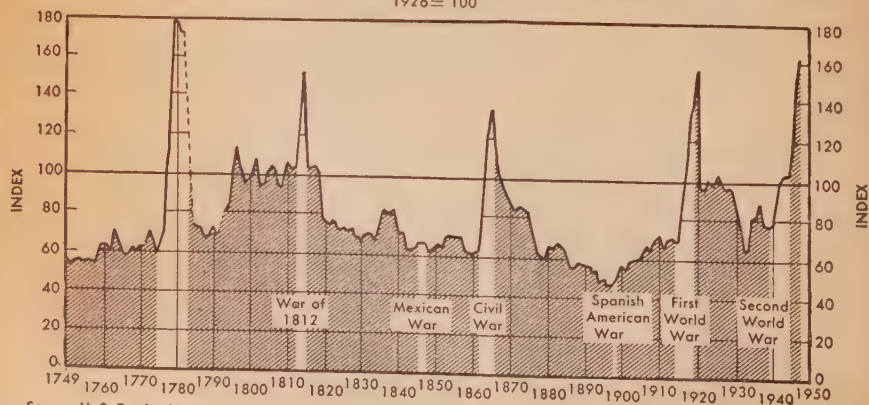
Consumer Price Index (1935-1939=100)

Year	All items	Food	Clothing	Rent	Fuel, electricity, and ice	House furnishings	Miscellaneous*
1929.....	122.5	132.5	115.3	141.4	112.5	111.7	104.6
1932.....	97.6	86.5	90.8	116.9	103.4	85.4	101.7
1937.....	102.7	105.3	102.8	100.9	100.2	104.3	101.0
1938.....	100.8	97.8	102.2	104.1	99.9	103.3	101.5
1939.....	99.4	95.2	100.5	104.3	99.0	101.3	100.7
1940.....	100.2	96.6	101.7	104.6	99.7	100.5	101.1
1941.....	105.2	105.5	106.3	106.2	102.2	107.3	104.0
1942.....	116.5	123.9	124.2	108.5	105.4	122.2	110.9
1943.....	123.6	138.0	129.7	108.0	107.7	125.6	115.8
1944.....	125.5	136.1	138.8	108.2	109.8	136.4	121.3
1945.....	128.4	139.1	145.9	108.3	110.3	145.8	124.1
1946.....	139.3	159.6	160.2	108.6	112.5	159.2	128.9
1947.....	159.2	193.8	185.8	111.2	121.1	184.4	139.9
1948†.....	168.6	207.1	195.5	116.2	130.5	193.7	146.9

*Includes transportation, medical care, household operation, recreation, personal care.
 †Average for first 5 months.

WHOLESALE PRICES All Commodities—Yearly Average

1926=100



Average Retail Prices of Principal Food Items

Source: U. S. Department of Labor.

Prices in cents per pound except for milk (cents per quart), eggs and oranges (cents per dozen), and tomatoes (cents per No. 2 can).

Item	1913	1920	1922	1929	1932	1939	1941	1943	1944	1945	1946	1947	1948†
Wheat flour.....	3.3	8.1	5.1	5.1	3.2	3.8	4.5	6.1	6.5	6.4	7.1	9.6	10.1
Corn meal.....	3.0	6.5	3.9	5.3	3.6	4.0	4.3	5.6	6.2	6.4	7.5	9.8	11.2
Bread, white.....	5.6	11.5	8.7	8.8	7.0	7.9	8.1	8.9	8.8	8.8	10.4	12.5	13.9
Round steak.....	22.3	39.5	32.3	46.0	29.7	36.0	39.1	43.9	41.4	40.6	50.1*	75.6	83.3
Chuck roast.....	16.0	26.2	19.2	31.4	18.5	23.4	25.5	30.2	28.8	28.1	35.3*	51.5	58.8
Pork chops.....	21.0	42.3	33.0	37.5	21.5	30.4	34.3	40.3	37.3	37.1	46.0*	72.2	71.7
Bacon, sliced.....	27.0	52.3	39.8	43.9	24.2	31.0	34.3	56.2	41.1	41.4	51.3*	77.7	76.1
Ham, whole.....	.....	.....	.....	.....	.....	27.5	30.4	37.7	35.4	34.7	45.6*	67.5	64.9
Lamb, leg.....	18.9	39.3	36.6	40.2	23.8	28.2	29.7	40.3	40.0	40.0	47.2*	64.2	66.8
Chickens, roasting.....	21.3	44.7	36.0	41.2	25.6	30.6	32.6	44.9	45.1	46.7	52.6	55.3	59.8
Butter.....	38.3	70.1	47.9	55.5	27.8	32.5	41.1	52.7	50.0	50.7	71.0	80.5	91.2
Cheese.....	22.1	41.6	32.9	39.5	24.4	25.3	30.0	37.4	36.1	35.6	50.1	59.1	63.6
Milk, fresh (delivered).....	8.9	16.7	13.1	14.4	10.7	12.2	13.6	15.5	15.6	15.6	17.6	19.6	21.1
Eggs.....	34.5	68.1	44.4	52.7	30.2	32.1	39.7	57.2	54.5	58.1	58.6	69.5	66.5
Bananas.....	...	12.6	10.3	9.7	6.5	6.3	7.2	11.7	11.3	10.4	11.6	15.1	15.5
Oranges.....	...	63.2	57.4	44.7	30.2	28.9	31.0	44.3	46.0	48.5	50.0	43.4	39.9
Cabbage.....	...	6.4	4.6	5.3	4.1	3.6	4.2	7.1	5.3	6.1	5.9	7.3	7.9
Onions.....	...	7.1	7.9	6.7	5.0	3.8	5.0	7.5	6.9	6.9	6.9	7.3	14.6
Potatoes.....	1.7	6.3	2.8	3.2	1.7	2.5	2.4	4.6	4.7	4.9	4.7	5.0	6.0
Tomatoes.....	...	14.8	13.4	12.8	9.3	8.6	9.1	15.0	12.0	12.2	15.0	19.3	16.6
Prunes, dried.....	...	28.1	20.1	15.3	9.2	8.9	9.8	16.6	17.0	17.5	19.1	24.7	21.6
Coffee.....	29.8	47.0	36.1	47.9	29.4	22.4	23.6	30.0	30.1	30.5	34.4	46.9	51.1
Lard.....	15.8	29.5	17.0	18.1	8.7	11.0	12.7	19.0	18.7	18.8	26.3	31.5	30.2
Sugar.....	5.5	19.4	7.3	6.4	5.0	5.4	5.7	6.8	6.8	6.7	7.7	9.7	9.5

*Average of 10 months only; prices not computed for Sept. and Oct. †Average of first five months.

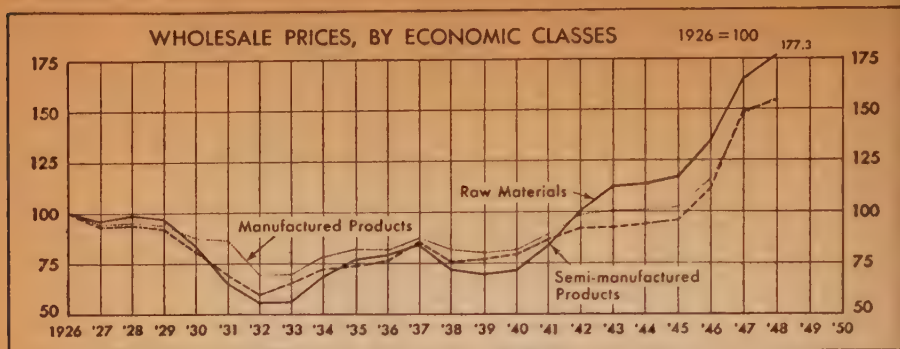
Wholesale Price Indexes by Major Commodity Groups (1926=100)

Source: U. S. Bureau of Labor Statistics.

Year	All commodities	Farm products	Foods	Hides and leather products	Textile products	Fuel and lighting	Metals and metal products	Building materials	Chemicals and allied products	House furnishing goods	Miscellaneous*
1890.....	56.2	50.4	55.5	47.5	57.8	38.1	105.3	46.5	73.2	49.9	97.9
1900.....	56.1	50.5	50.8	49.4	53.3	46.3	98.0	46.2	82.1	48.9	102.0
1910.....	70.4	74.3	64.9	60.2	58.4	47.6	85.2	55.3	82.0	54.0	152.7
1915.....	69.5	71.5	65.4	75.5	54.1	51.8	86.3	53.5	112.0	56.0	86.9
1916.....	85.5	84.4	75.7	93.4	70.4	74.3	116.5	67.6	160.7	61.4	100.6
1917.....	117.5	129.0	104.5	123.8	98.7	105.4	150.6	88.2	165.0	74.2	122.1
1918.....	131.3	148.0	119.1	125.7	137.2	109.2	136.5	98.6	182.3	93.3	134.4
1919.....	138.6	157.6	129.5	174.1	135.3	104.3	130.9	115.6	157.0	105.9	139.1
1920.....	154.4	150.7	137.4	171.3	164.8	163.7	149.4	150.1	164.7	141.8	167.5
1921.....	97.6	88.4	90.6	109.2	94.5	96.8	117.5	97.4	115.0	113.0	109.2
1922.....	96.7	93.8	87.6	104.6	100.2	107.3	102.9	97.3	100.3	103.5	92.8
1929.....	95.3	104.9	99.9	109.1	90.4	83.0	100.5	95.4	94.0	94.3	82.6
1932.....	64.8	48.2	61.0	72.9	54.9	70.3	80.2	71.4	73.9	75.1	64.4
1937.....	86.3	86.4	85.5	104.6	76.3	77.6	95.7	95.2	82.6	89.7	77.8
1939.....	77.1	65.3	70.4	95.6	69.7	73.1	94.4	90.5	76.0	86.3	74.8
1940.....	78.6	67.7	71.3	100.8	73.8	71.7	95.8	94.8	77.0	88.5	77.3
1941.....	87.3	82.4	82.7	108.3	84.8	76.2	99.4	103.2	84.4	94.3	82.0
1942.....	98.8	105.9	99.6	117.7	96.9	78.5	103.8	110.2	95.5	102.4	89.7
1943.....	103.1	122.6	106.6	117.5	97.4	80.8	103.8	111.4	94.9	102.7	92.2
1944.....	104.0	123.3	104.9	116.7	98.4	83.0	103.8	115.5	95.2	104.3	93.6
1945.....	105.8	128.2	106.2	118.1	100.1	84.0	104.7	117.8	95.2	104.5	94.7
1946.....	121.1	148.9	130.7	137.2	116.3	90.1	115.5	132.6	101.4	111.6	100.3
1947.....	151.8	181.3	168.7	181.9	140.9	108.7	145.1	179.5	127.3	121.9	114.3
1948†.....	162.9	189.3	176.0	190.4	149.0	131.2	155.9	194.0	136.1	142.0	121.5

*Includes automobile tires and tubes, paper and pulp, crude rubber and others.

†Average for first 5 months.



Farm Prices and Parity Prices

Source: U. S. Bureau of Agricultural Economics.

Product	Price received	Parity price*	Actual price as % of parity price
Wheat (bushel).....	\$2.03	\$2.22	91
Rye (bushel).....	1.72	1.81	95
Rice (bushel).....	3.09	2.04	151
Corn (bushel).....	2.02	1.61	125
Oats (bushel).....	.87	1.00	87
Barley (bushel).....	1.42	1.55	92
Sorghum grain (100 pounds)...	2.50	3.04	82
Hay (ton).....	18.20	29.80	61
Cotton (pound).....	.33	.31	106
Cottonseed (ton).....	96.00	56.60	170
Soybeans (bushel).....	3.66	2.41	152
Peanuts (pound).....	.10	.12	83
Flaxseed (bushel).....	5.83	4.24	138
Potatoes (bushel).....	1.66	1.86	89
Sweet potatoes (bushel).....	2.62	2.20	119
Apples (bushel).....	2.13	2.41	88
Oranges on tree (box).....	1.26	3.80	33
Hogs (hundredweight).....	25.90	18.20	142
Beef cattle (hundredweight)...	25.80	13.60	190
Veal calves (hundredweight)...	26.70	16.90	157
Lambs (hundredweight).....	26.20	14.80	178
Butterfat (pound).....	.84	.62	135
Milk, wholesale (100 pounds)...	4.80	3.74	128
Chickens (pound).....	.32	.29	110
Eggs (dozen).....	.46	.51	90
Wool (pound).....	.49	.46	107

*Parity price is the August 1909-July 1914 average price increased by the rise in index of prices paid by farmers, including interest and taxes.

Farm to Retail Price Spreads for Farm Food Products*

Source: U. S. Department of Agriculture.

Year	Retail cost (dollars)	Farm value (dollars)	Farmer's share of consumer's dollars (%)
Average:			
1913-1919 ..	362	173	47
1920-1924 ..	444	182	41
1925-1929 ..	439	186	42
1930	421	165	39
1931	339	121	36
1932	284	92	32
1933	276	90	33
1934	311	107	34
1935	347	138	40
1936	349	143	41
1937	362	156	43
1938	328	128	39
1939	316	122	39
1940	317	128	40
1941	347	154	44
1942	407	196	48
1943	458	236	52
1944	451	237	53
1945	459	247	54
1946	529	282	53
1947	643	344	53

*Retail cost of 1935-39 average annual purchases of farm food products by a family of three average consumers; farm value of equivalent quantities sold by producers adjusted for value of by-products.

WHAT WE OWN

What and how consumers, businessmen and government units save and invest jointly determines the enduring wealth of the country. Money, stocks, bonds, property of all kinds—these make up the stock of American wealth. The facts about them are statistically summarized and analyzed in the present section. The standard of living which our wealth enables us to enjoy is also itemized and compared with that of other nations.

The following figures on the expanding ownership of modern conveniences point up the rise in American living standards.

Automobiles: 8,000 in 1900; 17,500,000 in 1925; 30,545,000 today.

Telephones: 1,300,000 in 1900; 16,900,000 in 1925; 36,000,000 today.

Homes with radios: 3,700,000 in 1925; 37,623,000 today.

Homes with electric washers: 3,500,000 in 1926; 20,819,000 today.

Homes with electric ranges: 370,000 in 1926; 4,789,000 today.

Homes with vacuum cleaners: 5,200,000 in 1926; 16,356,000 today.

Homes with electric refrigerators: 142,000 in 1926; 23,525,000 today.

Selected Types of Individual Savings

(in millions of dollars)

Source: Federal Reserve Board, Treasury Department, Securities and Exchange Commission; "The Insurance Year Book," Federal Home Loan Bank, Department of Commerce.

Type	1939	1941	1942	1943	1944	1945	1946	1947
Life insurance.....	22,968	26,488	28,608	31,256	34,128	37,509	40,800	43,679
Time deposits:								
Mutual savings banks.....	10,523	10,532	10,664	11,738	13,376	15,385	16,869	17,746
Commercial banks.....	15,258	15,884	16,352	19,224	24,074	30,135	33,808	35,233
Postal savings system.....	1,278	1,313	1,415	1,786	2,340	2,932	3,283	3,416
Savings and loans association assets.....	4,060	4,652	4,910	5,494	6,305	7,405	8,505	9,705
Government pension and trust funds.....	7,369	10,369	12,769	16,569	21,269	26,369	29,769	33,169
U. S. savings bonds.....	2,229	6,212	15,050	27,363	40,361	48,183	49,776	52,053
Demand deposits.....	8,300	11,400	15,800	18,200	21,800	26,500	31,100	32,300
Currency.....	4,200	6,800	10,300	14,400	18,300	20,800	20,800	20,600
Total.....	76,185	93,650	115,868	146,029	181,953	215,218	234,710	247,901

Money in Circulation

(in millions of dollars)

Source: U. S. Treasury Department.

June 30	Total*	Gold certificates	Silver dollars	Silver certificates	Subsidiary silver	Minor coin	United States notes	Federal reserve notes	Federal reserve bank notes	National bank notes
1929....	4,746	935	44	387	284	115	262	1,693	4	653
1932....	5,695	716	30	353	256	114	289	2,780	3	701
1933....	5,721	266	28	361	257	113	269	3,061	126	920
1934....	5,374	150	30	402	280	119	280	3,068	142	902
1935....	5,567	117	32	702	296	125	285	3,223	82	704
1937....	6,447	88	38	1,078	341	144	282	4,169	38	269
1938....	6,461	79	39	1,230	342	146	262	4,114	30	217
1939....	7,047	72	42	1,454	361	155	266	4,484	26	187
1940....	7,848	67	46	1,582	384	169	248	5,163	22	165
1941....	9,612	63	53	1,714	434	194	300	6,684	20	151
1942....	12,383	59	66	1,754	504	213	317	9,310	19	139
1943....	17,421	57	84	1,649	610	236	322	13,747	584	132
1944....	22,504	54	103	1,588	700	263	322	18,750	597	126
1945....	26,746	52	125	1,651	788	292	323	22,868	527	120
1946....	28,245	50	140	2,025	843	317	317	23,973	464	114
1947....	28,297	48	148	2,061	876	331	320	23,999	406	106
1948....	27,903	45	156	2,061	919	346	321	23,600	353	99

*Includes Treasury notes of 1890 and for 1929 and 1932 gold coin.

Sales and Redemptions of United States Savings Bonds

(in millions of dollars)

Source: U. S. Treasury Department.

Year	All Series Sales*	Re-demptions	Amount outstanding†	Series E Sales*	Re-demptions	Amount outstanding†
1941	3,036	168	6,140	1,145	11	1,134
1942	9,157	349	15,050	5,990	209	6,923
1943	13,729	1,585	27,363	10,344	1,380	15,957
1944	16,044	3,341	40,361	12,380	3,005	25,515
1945	12,937	5,558	48,183	9,822	4,963	30,727
1946	7,427	6,427	49,776	4,466	5,423	30,263
1947	6,694	5,126	52,053	4,035	3,930	30,997
1948‡	3,362	2,625	53,274	2,195	1,901	31,625

*Issue price. †End of year. ‡Jan. to June, inclusive.

Distribution of Consumer Liquid Assets

Source: Federal Reserve Board.

Spending units ranked by incomes	% of net saving accounted for by each tenth			
	1947	1946	1945	1941
Highest tenth.....	77	63	46	73
Second tenth.....	16	16	13	15
Third tenth.....	6	14	13	6
Fourth tenth.....	6	7	8	5
Fifth tenth.....	3	4	5	5
Sixth tenth.....	4	1	4	3
Seventh tenth.....	2	2	3	1
Eighth tenth.....	-1	1	3	-1
Ninth tenth.....	-2	-3	2	-3
Lowest tenth.....	-11	-5	-2	-4
All units.....	100	100	100	100

WHAT WE OWE

Much modern wealth is also debt; one man's asset is frequently another man's liability. For example, while 85 million Americans consider their \$50 billion in war and savings bonds as assets they own, the bonds are also liabilities which, as part of the public debt, must be financed or retired.

Our steadily growing national debt was multiplied by the war. Worried by the size of this debt and the burden it enforced on the economy in the form of interest charges, people were sharply divided on the question of how much of our current income should be used for debt retirement.

The debt we incur as individuals took a nose dive early in the war, partly because of government restrictions and partly because many of the goods we normally buy on credit just weren't available. With the end of the war, however, consumer credit began to rise sharply. The continuing threat of inflation finally forced restoration of controls over installment sales in 1948, less than a year after they had been lifted.

Net Debt in the United States* (in billions of dollars)

Class	1918	1920	1925	1930	1935	1940	1945	1946	1947
Net Public Debt:									
Federal.....	1.2	23.7	20.3	16.5	34.4	44.8	252.7	229.7	223.3
State and local.....	4.4	5.9	10.0	14.1	16.0	16.5	13.7	13.6	14.4
Total public debt.....	5.6	29.6	30.3	30.6	50.5	61.3	266.5	243.3	237.7
Net Private Debt:									
Corporate.....	40.2	57.7	72.7	89.3	74.8	75.6	84.2	87.8	99.4
Long-term.....	29.1	32.6	39.7	51.1	43.6	43.7	38.3	41.0	45.1
Short-term.....	11.1	25.1	33.0	38.2	31.2	31.9	45.9	46.8	54.3
Individual & noncorporate.....	36.4	48.3	60.0	72.1	50.8	54.2	55.6	61.9	72.9
Mortgage: Farm.....	5.8	10.2	9.7	9.4	7.4	6.5	4.7	4.8	4.9
Nonfarm.....	8.6	12.1	21.9	33.1	26.2	27.3	29.9	33.5	40.3
Nonmortgage: Farm.....	2.0	3.9	2.8	2.4	1.5	2.6	2.5	2.8	3.6
Nonfarm.....	20.0	22.1	25.6	27.1	15.6	17.7	20.5	20.8	24.1
Total private debt.....	76.6	106.0	132.7	161.3	125.6	129.8	139.7	149.8	172.2
Total public and private debt.....	82.2	135.6	163.0	191.9	176.0	191.1	406.2	393.1	409.9

*End of year. Source: U. S. Department of Commerce.

Public Debt of the United States

Source: U. S. Treasury Department.

June 30—	Gross debt	
	Amount (in millions of dollars)	Per capita (dollars)
1800*.....	\$ 83	\$ 15.87
1860.....	65	2.06
1865.....	2,678	77.07
1900.....	1,263	16.56
1915.....	1,191	11.83
1920.....	24,299	228.33
1929.....	16,931	139.40
1930.....	16,185	131.49
1932.....	19,487	155.93
1933.....	22,539	179.21
1935.....	28,701	225.07
1937.....	36,425	281.80
1938.....	37,165	285.41
1939.....	40,440	308.29
1942.....	72,422	537.35
1943.....	136,696	1,001.55
1944.....	201,003	1,456.54
1945.....	258,682	1,855.90
1946.....	269,422	1,914.35
1947.....	258,286	1,793.46
1948.....	252,292	1,759.26

*Figures for 1800 are as of Jan. 1.

Consumer Credit

(in millions of dollars)

Source: Federal Reserve Board.

End of year	Consumer Credit			
	Total*	Installment sale debt	Charge account sale debt	Cash loan debt†
1929.....	7,637	2,515	1,749	2,768
1930.....	6,839	2,032	1,611	2,623
1932.....	4,093	999	1,114	1,489
1933.....	3,905	1,122	1,081	1,242
1935.....	5,419	1,805	1,292	1,850
1936.....	6,711	2,436	1,419	2,396
1937.....	7,491	2,752	1,459	2,713
1938.....	7,030	2,313	1,487	2,732
1939.....	7,994	2,792	1,544	3,113
1940.....	9,146	3,450	1,650	3,471
1941.....	9,895	3,744	1,764	3,760
1942.....	6,478	1,491	1,513	2,809
1943.....	5,334	814	1,498	2,316
1944.....	5,776	835	1,758	2,432
1945.....	6,637	903	1,981	2,957
1946.....	10,166	1,558	3,054	4,648
1947.....	13,385	2,839	3,612	6,052
1948†.....	13,814	3,258	3,263	6,361

*Includes service credit.

†Installment and open credit.

‡End of May.

UNITED STATES AND THE WORLD ECONOMY

TABLE I

United States Exports, Imports and Merchandise Trade

(Value in millions of dollars)

Yearly average, and year	Merchandise					Excess of exports (+) or imports (—)	
	Exports*		Cash as percent of total	General imports	Imports as percent of total exports	Total	Cash purchase\$
	Total†	Cash purchase‡					
1936-38.....	2,967	2,967	100.0	2,489	83.9	+478	+478
1939-41.....	4,115	3,853	93.6	2,763	67.1	+1,352	+1,090
1942-44.....	11,768	2,837	24.1	3,349	28.5	+8,419	-512
1941.....	5,147	4,367	84.8	3,345	65.0	+1,802	+1,022
1942.....	8,080	3,120	38.6	2,745	34.0	+5,335	+375
1943.....	12,965	2,549	19.7	3,381	26.1	+9,584	-832
1944.....	14,259	2,841	19.9	3,919	27.5	+10,340	-1,078
1945.....	9,803	3,760	38.3	4,136	42.2	+5,667	-376
1946.....	9,739	7,964	81.8	4,909	50.4	+4,830	+3,055
1947.....	14,456	13,714	94.9	5,731	39.6	+8,725	+7,983

*Includes reexports.

†Excludes Army "civilian supplies" as follows: 1944, \$155,000,000; 1945, \$724,000,000; 1946, \$447,000,000; and 1947, \$895,000,000. Total exports, including "civilian supplies" were: 1944, \$14,412,000,000; 1945, \$10,527,000,000; 1946, \$10,187,000,000; and 1947, \$15,352,000,000.

‡Represents total exports excluding lend-lease, UNRRA, and "private relief" shipments and other aid or relief.

§Excess of cash-purchase exports over total imports or excess of total imports over cash-purchase exports.

Sources: U. S. Department of Commerce.

TABLE II

Indexes of U. S. Exports & Imports

Yearly average and year	Quan- tity	Unit value	Value
Total exports, United States merchandise:*			
1936-38.....	100	100	100
1939-41.....	135	102	138
1942-44.....	269	148	399
1929.....	136	130	176
1937.....	108	104	113
1941.....	157	109	172
1942.....	206	133	274
1943.....	301	146	139
1944.....	290	167	484
1945.....	197	167	328
1946.....	206	158†	325
1947.....	256	191	488
Imports for consumption:			
1936-38.....	100	100	100
1939-41.....	104	105	109
1942-44.....	97	140	136
1929.....	114	154	177
1937.....	114	108	122
1941.....	117	112	131
1942.....	87	129	113
1943.....	97	141	138
1944.....	105	151	158
1945.....	107	155	166
1946.....	113	172	195
1947.....	109	210	229

*Includes lend-lease, UNRRA, other aid and relief, and commercial exports.

†Apparent price decline is due to the diminishing part in total trade of lend-lease exports, which had shown a greater price rise during the war years than non-lend-lease goods. In 1945 the unit value of non-lend-lease exports was 144 (1936-38 as 100) as compared with 167, the unit value of total exports as shown in this table.

U. S. Foreign Trade

United States foreign trade reached peak levels during 1947. Exports for the year reached a record value of \$14,456 million, representing a gain of 48 percent over the 1946 total of \$9,739 million and 76 percent over 1920, which had recorded the previous high peacetime value of \$8,228 million. It also represented a slight gain over the \$14,259 million total of goods exported during the highest war year, 1944, when lend-lease shipments (comprising mainly military goods) constituted 80 percent of the exports.

Imports also reached record value levels during 1947, totaling \$5,731 million, which represented an increase of 17 percent above the 1946 value of \$4,909 million and 9 percent over the previous peak of \$5,278 million recorded during 1920. Despite the increase in value, the physical volume of imports was smaller than in 1946. Total imports in 1947, moreover, constituted a smaller percentage of total exports than in 1946—39.6 percent against 50.4 percent. Table I presents the value of U. S. exports, imports, and the balance of merchandise trade from 1936 to 1947; table II shows the changes in quantity, unit value and total value of United States exports and imports.

The gap between the value of U. S. merchandise exports and imports during 1947

amounted to \$8,725 million. Altogether the difference between total United States receipts on current account of \$19,603 million during 1947 and United States payments to foreigners of \$8,327 million amounted to \$11,276 million. Foreign countries financed this deficit in their dealings with the United States by: (1) liquidating gold and dollar assets (\$4,514 million); (2) U. S. government grants (\$1,812 million); (3) U. S. government loans (\$3,900 million); (4) assistance from the International Bank and the International Monetary Fund (\$761 million); (5) private loans and remittances (\$1,295 million). Table III shows U. S. exports of goods and services and means of financing from 1945, including the first quarter of 1948.

The tremendous gap between what the United States earns by exports of goods and services and what foreigners supply this country accounts for the so-called "dollar shortage." U. S. imports of foreign goods have been held down chiefly by post-war production difficulties abroad caused by shortages of raw materials, transportation bottlenecks, and equipment failures. With dollars earned by exports to the United States limited, foreign countries have been forced to place severe restrictions on imports of unessential products from this country. So difficult did this situation become that many nations were no longer in a position to finance imports from the United States essential to the maintenance of reasonable living standards.

This condition in some Western European nations created the danger that Communism would spread and led to the formulation of the European Recovery Program. Idea behind ERP is to assist Western Europe by supplying the food, raw materials, and industrial equipment it needs, and is not in a position to pay for, until it can be put on a self-supporting basis. Five billion dollars will be available during the first year of the program (April 1948 to April 1949). Table IV shows the deficit incurred by the Marshall Plan and other foreign countries in their transactions with the U. S. during 1947; table V presents the allocation of ERP funds by the Economic Cooperation Administration among the countries participating in the recovery program for the first fiscal year. Switzerland and Portugal requested no ECA allotment for this period. In addition to Western Europe, U. S. assistance in the form of loans and grants is being extended to Greece, Turkey, China, the Philippines and other countries. It is expected that U. S. government grants and loans to all countries will total \$7.6 billion during 1948.

During the twenties the ratio of exports to the total production of movable goods averaged about 10 percent. Table VI, showing the ratio between exports and the total production of movable goods indicates that, while this proportion declined during the thirties and stood at 7.7 percent in 1937, it increased to 12 percent during

TABLE III
Exports of Goods and Services and Means of Financing
(Millions of dollars)

Source: U. S. Department of Commerce.

Item	1945	1946	1947					1948
			I	II	III	IV	Total	I
Exports of goods and services.....	16,273	14,966	4,816	5,277	4,801	4,847	19,741	4,450
MEANS OF FINANCING								
Foreign resources:								
United States imports of goods and services.....	10,232	7,167	2,022	2,149	2,074	2,218	8,463	2,485
Liquidation of gold and dollar assets*	-2,633	1,968	1,197	1,144	856	1,317	4,514	368
Dollar disbursements by:								
International Monetary Fund.....				56	148	260	464	132
International Bank.....				92	142	63	297	103
United States Government aid:								
Grants (net).....	6,640	2,279	444	457	492	419	1,812	842
Long- and short-term loans (net)†.....	1,019	2,774	854	1,538	1,201	307	3,900	606
United States private sources:								
Remittances (net).....	473	598	145	119	138	166	568	159
Long- and short-term capital (net)‡.....	550	335	301	207	98	121	727	230
Errors and omissions.....	-8	-155	-147	-485	-348	-24	-1,004	-475

*Excluding assets held by the International Bank and the International Monetary Fund.

†Excluding the subscriptions to the International Bank and the International Monetary Fund.

‡Excluding the purchase of debentures issued by the International Bank.

TABLE IV

Merchandise and Service Transactions of the U. S. in 1947

(Millions of dollars)

Source: U. S. Department of Commerce.

	All countries	ERP countries	Other countries
Receipts:			
Goods and services:			
Goods.....	16,022	5,704	10,318
Income on investments.....	1,026	143	883
Travel.....	278	57	221
Shipping.....	1,728	1,033	695
Miscellaneous services.....	549	299	250
Total goods and services.....	19,603	7,236	12,367
Payments:			
Goods and services:			
Goods.....	6,047	777	5,270
Income on investments.....	226	132	94
Travel.....	535	95	440
Shipping.....	730	366	364
Miscellaneous services.....	789	325	464
Total goods and services.....	8,327	1,695	6,632
Excess of receipts.....	11,296	5,541	5,735

TABLE V

Economic Cooperation Administration

Country	Allotment
Austria.....	\$ 217,000,000
Belgium-Luxemburg.....	250,000,000
Denmark.....	110,000,000
France.....	989,000,000
Germany, Bizone.....	414,000,000
French zone.....	100,000,000
Greece.....	146,000,000
Iceland.....	11,000,000
Ireland.....	79,000,000
Italy.....	601,000,000
Netherlands*.....	496,000,000
Norway.....	84,000,000
Sweden.....	47,000,000
Trieste.....	18,000,000
Turkey.....	50,000,000
United Kingdom.....	1,263,000,000
Total.....	4,875,000,000

*Includes \$84,000,000 for the Netherlands Indies.

TABLE VI

United States Production of Movable Goods, Value of Exports, and the Proportion Exported in Selected Years
(In billions of dollars)

Source: U. S. Department of Commerce.

Year	Production of movable goods	Exports	Exports as percentage of production
1914.....	20.2	2.1	10
1919.....	47.5	7.8	16
1921.....	33.9	4.4	13
1925.....	47.2	4.8	10
1927.....	47.5	4.8	10
1929.....	53.2	5.2	10
1937.....	44.0	3.3	7.7
1939.....	41.9	3.1	7.5
1941.....	64.2	5.0	8
1943.....	113.1	12.6	11
1944.....	114.8	14.2	12
1945.....	102.9	9.6	9
1946.....	100.4	11.9*	11.9
1947.....	130.0	15.0	11.7

*Excluding 1.6 billion dollars of surplus property.

shellac, tin, antimony, cadmium, manganese, chrome, nickel, asbestos, mica, quartz crystals, natural rubber, silk, diamonds, burlaps, and cordage fibres are almost entirely imported from abroad. In addition large imports of sugar, hides, furs, wool, wood pulp, newsprint, lead, zinc, copper, bauxite, waxes, tanning extracts, vegetable oils and crude petroleum are needed to augment short domestic production.

Tables VII and VIII list the principal United States commodity exports and imports from 1936 to 1947.

United States exports reflect the industrial character of the country, 60.2 percent of total exports in 1947 consisting of fin-

1944. The percentage of movable goods exported during 1947 was 11.7 percent.

On the other hand, the ratio of United States commodity imports to national income ranged during the pre-war period from a high of 7.6 in 1920 to a low of 3.1 in 1938. During the ten-year period 1919 to 1928, the average percentage was 5.6, while during the thirties it declined to 3.6 percent. In 1947, imports constituted 2.8 percent of total national income.

Because the percentage of movable goods exported and the ratio of commodity imports to national income are small, there is a widespread belief that foreign trade is not important to the American economy. This view overlooks the importance of export markets to particular industries and the strategic character of many imports. Exports account for major percentages of the total United States production of cotton, leaf tobacco, dried fruit, lard, aircraft and parts, sewing machines, office appliances, mining machinery, tractors, petroleum products, sulfur, carbon black and naval stores. Volume exports mean the difference between profit and loss in many American industries.

Similarly, the United States is dependent upon imports to supply many goods essential to American security, living standards and the continued efficient operation of its industry. Coffee, bananas, cocoa, chicle,

TABLE VII

United States Exports of Leading Commodities by Economic Groups

(Value in millions of dollars. Commodities in each group are listed in order of value of total trade in 1947)

Source: U. S. Department of Commerce.

Commodity	Quantity			Value		
	1936-38 average	1946	1947	1936-38 average	1946	1947
Crude materials:						
Coal (1,000 long tons).....	12,356	42,595	68,881	56	302	619
Cotton, unmanufactured (mil. lb.).....	2,880	2,006	1,380	319	538	423
Tobacco, unmanufactured (do).....	450	663	507	143	352	271
Crude petroleum (1,000 bbl.).....	64,898	42,574	45,862	91	74	98
Foodstuffs:						
Wheat, including flour (mil. bu.).....	62	306	350	62	610	892
Dairy products and eggs.....				6	450	338
Fruits and vegetables.....				98	297	279
Meats and edible fats (mil. lb.).....	290	1,796	755	43	434	226
Manufactures, including semimanufactures:						
Machinery, total*.....				434	1,368	2,353
Electrical apparatus.....				102	304	563
Industrial machinery, total.....				224	842	1,337
Agricultural implements.....				65	158	318
Tractors, new (number).....	33,180	65,975	108,534	36	76	146
Textiles and textile manufactures†.....				87	732	1,375
Cotton cloth, duck, and tire fabric (mil. sq. yd.).....	252	775	1,468	27	223	525
Automobiles, including parts and accessories, total.....				286	528	1,098
Passenger automobiles, new (thousand).....	190	117	267	113	123	335
Motortrucks and busses, new (do).....	129	171	273	76	231	404
Iron and steel-mill products:						
Total, including scrap (1,000 long tons).....	5,291	4,581	6,241	199	447	825
Total, excluding scrap (do).....	2,278	4,448	6,068	149	444	815
Chemicals and related products‡.....				117	490	766
Merchant vessels (number).....	12	1,483	1,838	2	117	625
Petroleum products.....				253	361	542
Motor fuel and gasoline (1,000 bbl.).....	31,176	38,311	36,854	82	106	135
Lubricating oils (do).....	9,588	10,924	14,076	74	115	195

*Includes electrical apparatus, industrial machinery, office appliances, printing machinery, and agricultural machinery and implements.

†Includes finished products, and yarns and other semimanufactures.

‡Excludes explosives and phosphate rock.

ished manufactured goods. Semimanufactured goods accounted for 12.1 percent, foodstuffs 16.6 percent and crude materials 11.1 percent. Food exports during 1947 constituted a higher percentage of total exports than prewar, reflecting an over-all world shortage of foodstuffs. United States exports of foodstuffs averaged only 10.5 percent of total exports prewar.

Crude industrial materials represented the most important class of imported goods, amounting to 30.9 percent of the total. Foodstuffs followed with 29.6 percent, semimanufactures 22.1 percent and finished manufactures 17.4 percent. Foods not produced in the United States and raw materials for American industry constituted the most important imports. Table IX presents a breakdown of United States exports and imports by economic classes.

Western hemisphere countries are the leading market for American exports and

the most important source of United States imports. In 1947 Canada and the other American Republics supplied 56.6 percent of United States imports and bought almost 41 percent of total exports. The importance of western hemisphere countries in the foreign trade of the United States increased greatly during the war and postwar period—prewar these countries supplied only 34.7 percent of total imports and accounted for but 32.6 percent of United States exports. As a result of war damage and disorganized production and distribution, Europe and the Far East declined in importance as sources of United States imports; imports from continental Europe and the Far East declined from 20.4 percent and 30.5 percent of total imports during the 1936-38 period to 9.3 percent and 19.1 percent respectively in 1947. Latin America expanded its purchases of United States exports more than any other area

during 1947. Compared with 16 percent in the period 1936-38 and 22 percent in 1946, the American Republics received 27 percent of total U. S. exports during that year. The 1947 total amounted to \$3,852 million, an increase of nearly 700 percent over the pre-war average and almost 83 percent over 1946.

Imports from Latin America totaled \$2,150 million in 1947, showing an increase of nearly 300 percent over the 1936-38 average, and 22 percent over 1946. Normally U. S. imports from this area exceeds the value of U. S. exports; heavy adverse Latin

American trade balances with the U. S. of \$340 million during 1946 and \$1,708 million in 1947 were largely due to heavy deferred demands for manufactured goods which could not be satisfied during the war and continued inability of European sources to supply requirements. Adverse balances have greatly reduced Latin American dollar reserves and led to severe restrictions on non-essential imports throughout Latin America.

Table X shows total exports and imports by leading countries and areas during the period 1936 to 1947.

TABLE VIII

Imports for Consumption of Leading Commodities, by Economic Groups
(Value in millions of dollars. Group totals are shown in table)

Source: U. S. Department of Commerce.

Commodity	Quantity			Value		
	1936-38 average	1946	1947	1936-38 average	1946	1947
Crude materials:						
Crude rubber (mil. lb.).....	1,116	840	1,587	179	228	317
Wool, unmanufactured (mil. lb.*).....	229	1,063	634	57	290	209
Oilseeds (mil. lb.).....	1,908	1,268	1,700	46	53	139
Copra (do).....	472	789	1,385	12	30	107
Flaxseed (do).....	1,100	190	16	24	8	2
Crude petroleum (thous. bbl.).....	28,772	89,210	99,315	21	102	162
Nonferrous ores and concentrates†.....				32	116	150
Tobacco, unmanufactured (mil. lb.).....	70	82	90	34	86	91
Undressed furs.....				65	232	122
Hides and skins, raw, except furs (mil. lb.).....	268	217	179	52	78	86
Raw silk (thous. lb.).....	57,791	13,361	2,457	99	101	16
Foodstuffs:						
Coffee (mil. lb.).....	1,808	2,738	2,501	141	472	600
Cane sugar (do).....	6,092	5,252	8,330	152	196	411
Fruit, edible nuts and vegetables.....				81	195	136
Cocoa or cacao beans (mil. lb.).....	568	595	599	36	57	152
Fish, including shellfish (do).....	346	473	407	31	90	83
Wines and spirits.....				70	85	64
Semimanufactures:						
Nonferrous metals, total‡.....				146	205	368
Copper, refined, unrefined, old and scrap (mil. lb.).....	354	647	745	35	78	143
Tin bars, blocks, pigs (do).....	157	35	56	75	19	43
Aluminum metal, plates and sheets (do).....	29	114	62	5	12	6
Wood pulp (1,000 S. ton).....	2,128	1,805	2,332	86	136	257
Vegetable oils and fats, expressed (mil. lb.).....	1,364	237	383	86	65	109
Tung oil (do).....	140	36	122	18	12	35
Linseed oil (do).....	§	94	117	§	17	34
Gas oil and fuel oil (thous. bbl.).....	28,646	56,801	62,919	20	56	85
Diamonds, gems cut but unset (thous. carats).....	432	605	348	23	118	53
Finished manufactures:						
Paper and manufactures.....				120	254	363
Newsprint (mil. lb.).....	5,562	6,984	7,916	107	241	343
Burlaps (do).....	573	556	542	35	77	109
Clocks and watches.....				9	65	54
Wool manufactures.....				20	32	33
Flax, hemp, and ramie manufactures.....				26	30	22
Cotton manufactures.....				42	35	24

*Actual weight.

†Including those used in manufactures of iron and steel.

‡Including those used in manufacture of iron and steel, also a small value of finished products.

§Less than one-half of the unit specified.

TABLE IX: Merchandise Trade by Economic Classes

(Value in millions of dollars)

Yearly average and year	Total		Crude materials		Foodstuffs		Semimanufactures		Finished manufactures excluding military		Military equipment*	
	Value	Per cent	Value	Per cent	Value	Per cent	Value	Per cent	Value	Per cent	Value	Per cent
Exports of United States merchandise:												
1936-38.....	2,925	100.0	659	22.9	306	10.5	519	17.7	1,422	48.6	9†	0.3
1939-41.....	4,026	100.0	457	11.4	352	8.7	737	18.8	1,946	48.3	515	12.8
1942-44.....	11,669	100.0	545	4.7	1,473	12.6	1,035	8.9	3,895	33.4	4,721	40.5
1945.....	9,586	100.0	675	9.1	1,676	17.5	782	8.2	4,341	45.3	1,909	19.9
1946.....	9,502	100.0	1,416	14.9	2,172	22.9	896	9.4	4,942	52.0	77§	.8
1947†.....	14,278	100.0	1,578	11.1	2,365	16.6	1,733	12.1	8,602	60.2	.....	.....
Imports for consumption:												
1936-38.....	2,461	100.0	760	30.9	720	29.2	503	20.4	477	19.4	1	**
1939-41.....	2,680	100.0	1,044	39.0	622	23.2	590	22.0	423	15.8	1	**
1942-44.....	3,346	100.0	1,052	31.4	997	29.8	674	20.1	467	14.0	155	4.6
1945.....	4,075	100.0	1,164	28.6	1,155	28.3	928	22.6	632	15.5	196	4.8
1946.....	4,792	100.0	1,700	35.5	1,317	27.5	930	19.4	840	17.5	5	.1
1947.....	5,642	100.0	1,742	30.9	1,672	29.6	1,246	22.1	983	17.4	.....	.....

*Military equipment includes aircraft, military tanks, explosives, firearms, and other strictly military items through 1945; largely aircraft parts and accessories and firearms and ammunition in 1946.

†Excludes Army "civilian supplies"; totals including "civilian supplies" as follows: Total, \$15,173,000,000; crude materials, \$1,601,000,000; foodstuffs, \$3,124,000,000; semimanufactures, \$1,783,000,000; and finished manufactures, \$8,666,000,000. Percentage distribution including "civilian supplies," crude materials, 10.6 percent; foodstuffs, 20.6 percent; semimanufactures 11.8 percent; and finished manufactures, 57.1 percent.

‡Explosives and firearms only. §Mainly aircraft parts. **Less than one-tenth of 1 percent.

TABLE X: Total Exports, and General Imports of Merchandise, by Leading Countries

(Value in millions of dollars)

Country and area	Value			Percentage of distribution		
	1936-38 average	1946	1947	1936-38 average	1946	1947
Total exports, including lend-lease and relief ¹	2,967	9,739	14,456	100.0	100.0	100.0
Canada.....	454	1,442	2,073	15.3	14.8	14.3
American Republics.....	485 ²	2,100	3,852	16.3	21.6	26.6
United Kingdom.....	499	856	1,113	16.8	8.8	7.7
U. S. S. R.....	49	358	149	1.7	3.7	1.0
Continental Europe ³	678	2,851	3,844	22.9	29.3	26.6
Western countries ⁴	609	2,246	3,396	20.5	23.1	23.5
Central and Eastern areas ⁵	69	605	448	2.3	6.2	3.1
Africa and Near East.....	160	619	1,125	5.4	6.4	7.8
Far East ⁶	557	1,328	1,935	18.8	13.6	13.4
All other.....	85	185	365	2.9	1.9	2.5
Total general imports.....	2,489	4,909	5,731	100.0	100.0	100.0
Canada.....	345	883	1,095	13.9	18.0	19.1
American Republics.....	543 ²	1,760	2,150	21.8	35.9	37.5
United Kingdom.....	174	156	205	7.0	3.2	3.6
U. S. S. R.....	25	100	77	1.0	2.0	1.3
Continental Europe ³	507	535	531	20.4	10.9	9.3
Western countries ⁴	414	471	438	16.6	9.6	7.6
Central and Eastern areas ⁵	92	65	93	3.7	1.3	1.6
Africa and Near East.....	97	490	434	3.9	10.0	7.6
Far East ⁶	758	880	1,097	30.5	17.9	19.1
All other.....	41	105	142	1.6	2.1	2.5

¹Includes re-exports. ²Includes Canal Zone in 1936 and 1937. ³Continental Europe, excluding U.S.S.R.

⁴Includes Sweden, Norway, Denmark, Netherlands, Belgium, France, Germany, Austria, Switzerland, Spain, Portugal, and Italy.

⁵Includes Czechoslovakia, Hungary, Finland, Estonia, Latvia, Lithuania, Poland, Yugoslavia, Albania, Greece, Rumania, and Bulgaria. ⁶Asia other than the Near Eastern area, and Australia and Oceania.

Sources: U. S. Department of Commerce.

U. S. Foreign Investments

Before the First World War the United States was a debtor nation on capital account; foreign investments in the United States exceeded United States investments abroad by \$3.7 billions in 1914. World War I, however, completely changed this condition and by the end of 1919, United States investments abroad exceeded foreign investments in the United States by approximately \$3.7 billion. As a result of the great expansion of American foreign investments during the twenties, our net creditor position, excluding war debts, stood at \$8.8 billion in 1930 as compared with \$3.7 billion in 1919.

Foreign holdings in the United States, on the other hand, increased during the period 1933-39. Foreign capital, seeking safety from possible currency devaluation and the uncertainties of war, sought refuge through conversion into dollar holdings. Short-term dollar holdings of foreigners increased \$2.8 billion between 1933 and 1939, while foreign holdings of American securities largely purchased in the stock market, increased by \$1.4 billion. At the end of 1939, the net creditor position of the U. S. had declined to \$1.8 billion.

This movement gave way in 1940-41 to a reduction of foreign holdings, principally by the British, to finance war purchases here. After the entry of the United States into the war, however, foreign holdings in the United States increased as government expenditures abroad for the procurement of materials and for the pay and maintenance of troops resulted in substantial acquisitions of dollar balances by foreign countries. These large foreign dollar balances were largely maintained during 1946 so that the net creditor position of the U. S. amounted to \$.8 billion at the end of 1946.

During 1947 the net creditor position of the United States rapidly increased as foreign countries reduced their dollar balances, liquidated U. S. securities, and drew on American loans to finance the huge gap between their payments and receipts of dollars. The United States government increased its total loans by \$3.9 billion—largely as a result of drawings on the British loan—and the net increase in private long and short-term credit amounted to \$727 million. Foreign-held dollar assets were reduced by \$2.2 billion. As a result of these developments the net creditor position of the United States exceeded \$12 billion at the end of 1947. Its position can be expected to increase during 1948 as part of ECA aid will take the form of loans.

International Bank

The International Bank for Reconstruction and Development, established under the Bretton Woods Agreement, began operations in 1947.

TABLE XI: Debtor-Creditor Position of the U. S., End of 1947*
(in billions of dollars)

Source: U. S. Department of Commerce.

United States investments abroad:		1947
Private:		
Long-term:		
Direct (book value)†	.....	9.8
Bonds payable in dollars (market value)	.....	1.3
Bonds payable in foreign currencies (market value)	.....	2.6
Estates, trusts	.....	.2
Miscellaneous	.....	1.3
Total long-term	.....	14.8
Short-term	.....	1.4
Total private	.....	16.2
Government:		
Long-term	.....	11.7
Short-term	.....	.4
Total government	.....	12.1
Total U.S. investments abroad	.....	28.3
Foreign investments in the United States:		
Private:		
Long-term:		
Direct (book value)	.....	2.6
Corporate shares (market value)	.....	2.8
Corporate, state, and municipal bonds (market value)	.....	.4
Estates, trusts	.....	.7
Miscellaneous	.....	.9
Total long-term	.....	7.4
Short-term:		
Deposits	.....	4.7
Brokerage balances	.....	.1
Others	.....	.3
Total short-term	.....	5.1
Total private	.....	12.5
Government:		
Long-term	.....	.4
Short-term	.....	3.5
Total Government	.....	3.9
Total foreign investments in the U.S.	.....	16.4

*Preliminary estimates.

†No allowance has been made for write-offs and war damage to American properties in foreign countries inasmuch as the full extent of such damage is unknown. It may, however, run into several hundred million dollars.

NOTE: Although the entire U. S. investments in international institutions, including subscription of \$687.5 million in gold to the International Monetary Fund, is included in U. S. investments abroad, the gold held by international institutions or others in U. S. is not included as foreign investments in U. S. short- and long-term investments of international institutions in U. S. were \$2,330,000,000 at end of 1947.

**TABLE XII: Loans of the International Bank
June 30, 1948**

Country	Date	Amount (millions of dollars)
France	May 9, 1947	250
Netherlands	Aug. 7, 1947	195
Denmark	Aug. 22, 1947	40
Luxemburg	Aug. 28, 1947	12
Chile	March 25, 1948	16
Total		\$513

The Bank has an authorized capital of \$10 billion, of which \$8,263 million has been subscribed by the 46 member nations. However, in accordance with the Bank's charter only 20 percent of the subscriber capital has been paid in. As of March 31, 1948 the aggregate paid-in capital was the equivalent of \$1,648 million, of which \$732 million was in U. S. dollars.

In addition to its paid-in capital, the Bank may obtain funds through the sale of securities and is authorized to guarantee loans made by agencies. Total loans and guarantees made by the Bank are limited to its subscribed capital. The Bank began its borrowing operations on July 15, 1947 and two bond issues totaling \$250 million were publicly sold in the United States.

TABLE XIII: International Transactions of the U. S. in 1947

(Millions of dollars)

Source: U. S. Department of Commerce.

	First quarter	Second quarter	Third quarter	Fourth quarter	Total
Receipts:					
Goods and services:					
Goods.....	3,911	4,306	3,877	3,928	16,022
Income on investments.....	162	269	190	405	1,026
Other services.....	590	679	656	630	2,555
Total goods and services.....	4,663	5,254	4,723	4,963	19,603
Unilateral transfers.....	173	159	131	118	581
Long-term capital:					
Movements of United States capital invested abroad.....	289	351	222	102	964
Movements of foreign capital invested in United States.....	7	.....	.....	31	38
Total long-term capital.....	296	351	222	133	1,002
Total receipts.....	5,132	5,764	5,076	5,214	21,186
Payments:					
Goods and services:					
Goods.....	1,495	1,529	1,399	1,624	6,047
Income on investments.....	47	52	55	72	226
Other services.....	448	465	642	499	2,054
Total goods and services.....	1,990	2,046	2,096	2,195	8,327
Unilateral transfers.....	775	776	771	707	3,029
Long-term capital:					
Movements of United States capital invested abroad.....	4,163	1,878	1,901	718	8,660
Movements of foreign capital invested in United States.....	51	25	59	1	136
Total long-term capital.....	4,214	1,903	1,960	719	8,796
Total payments.....	6,979	4,725	4,827	3,621	20,152
Excess of receipts (+) or payments (-):					
Goods and services.....	+2,673	+3,208	+2,627	+2,768	+11,276
Unilateral transfers.....	-602	-617	-640	-589	-2,448
Goods and services and unilateral transfers.....	+2,071	+2,591	+1,987	+2,179	+8,828
Long-term capital.....	-3,918	-1,552	-1,738	-586	-7,794
All transactions.....	-1,847	+1,039	+249	+1,593	+1,034
Net flow of funds on gold and short-term capital account:					
Net increase (-) or decrease (+) in gold stock.....	+81	-792	-667	-784	-2,162
Net movement of United States short-term capital abroad.....	-112	-312	+144	+15	-265
Net movement of foreign short-term capital in United States.....	+1,686	-376	-190	-809	+311
Net inflow (+) or outflow (-) of funds.....	+1,655	-1,480	-713	-1,578	-2,116
Errors and omissions.....	+192	+441	+464	-15	+1,082

In addition, the equivalent of \$4 million was realized by an offering of bonds in Switzerland.

Up to the middle of 1948 loans aggregating \$513 million have been made to France, the Netherlands, Denmark, Luxembourg, and Chile. Table XII shows the amount and date of the loans made by the International Bank.

The Bank finances or assists in financing, on a non-political basis, projects for the reconstruction of war-damaged economies and for the development of underdeveloped countries. The loans made must be guaranteed by the borrowing country. The U. S. subscription to the Bank's capital is \$3,175 million and this country has approximately 34 percent of the voting control of the Bank.

Foreign Exchange

The obvious difference between foreign and ordinary domestic trade is the fact that the buyer and seller use different currency units. The United States exporter wants payments in dollars; the British importer uses sterling in making his purchases and sales. The price which the American importer pays for the foreign currency is called the rate of exchange. Like all prices, exchange rates are basically determined by the forces of supply and demand—although almost all governments conduct pegging operations at present. American importers offer dollars to the banks in order to obtain foreign purchasing power. Consequently, importers and those who are making foreign payments, such as tourists traveling abroad, persons sending funds to relatives in foreign countries, and businessmen paying premiums to insurance companies abroad, create a demand for foreign currencies. Exporters selling to foreign buyers, motion picture companies receiving royalties on films exhibited abroad and investors receiving interest on foreign investments, create the supply of foreign currencies since the foreign debtor must offer his own currency to obtain the dollars with which to make payment to the American creditor.

A world picture of total supply of and demand for dollars over a period of a year is presented by the annual summary of our international balance of accounts for 1947 which appears in Table XIII.

Monetary Fund

The Monetary Fund was established to promote world trade by insuring the stability of exchange rates. Exchange instability had disrupted international trade during the thirties. Member nations under the Fund agreement are bound to maintain stable exchange rates and may not use exchange depreciation as a competitive

weapon in seeking to expand foreign markets for their products.

Forty-six nations are members of the Fund, total subscriptions amount to \$7.98 billion, the United States subscription of \$2.75 billions representing 34.5 percent of the total; this country exercises 31.5 percent of the voting control of the Fund.

The Fund is basically a pool of the

TABLE XIV

International Monetary Fund Par Values of Member Currencies*

Source: International Monetary Fund.

Member	Currency	U. S. cents per currency unit	Currency units per U. S. dollar
Australia.....	Pound	322.400	310 174
Belgium.....	Franc	2.281 67	43.827 5
Bolivia.....	Boliviano	2.380 95	42.000 0
Brazil.....	Cruzeiro	5.405 41	18.50
Canada.....	Dollar	100.000	1.000 00
Chile.....	Peso	3.225 81	31.000 0
China.....	Yuan†	‡	‡
Colombia.....	Peso	57.143 3	1.749 99
Costa Rica.....	Colón	17.809 4	5.615 00
Cuba.....	Peso	100.000	1.000 00
Czechoslovakia.....	Koruna	2.000 00	50.000 0
Denmark.....	Krone	20.837 6	4.799 01
Dominican Republic.....	Peso	100.000	1.000 00
Ecuador.....	Sucres	7.407 41	13.500 0
Egypt.....	Pound	413.300	241 955
El Salvador.....	Colón	40.000 0	2.500 00
Ethiopia.....	Dollar	40.250 0	2.484 47
Finland.....	Markka	‡	‡
France.....	Franc	‡	‡
Greece.....	Drachma	‡	‡
Guatemala.....	Quetzal	100.000	1.000 00
Honduras.....	Lempira	50.000 0	2.000 00
Iceland.....	Króna	15.411 1	6.488 85
India.....	Rupie	30.225 0	3.308 52
Iran.....	Rial	3.100 78	32.250 0
Iraq.....	Dinar	403.000	248 139
Italy.....	Lira	‡	‡
Lebanon.....	Pound	45.631 3	2.191 48
Luxembourg.....	Franc	2.281 67	43.827 5
Mexico.....	Peso	20.597 3	4.855 00
Netherlands.....	Guilder	37.695 3	2.652 85
Nicaragua.....	Córdoba	20.000 0	5.000 00
Norway.....	Krone	20.150 0	4.962 78
Panamá.....	Balboa	100.000	1.000 00
Paraguay.....	Guaraní	32.362 5	3.090 00
Peru.....	Sol	15.384 6	6.500 00
Philippines.....	Peso	50.000 0	2.000 00
Poland.....	Zloty	‡	‡
Syria.....	Pound	45.631 3	2.191 48
Turkey.....	Lira §	35.714 3	2.800 00
Union of South Africa.....	Pound	403.000	248 139**
United Kingdom.....	Pound	403.000	248 139**
United States.....	Dollar	100.000	1.000 00
Uruguay.....	Peso	‡	‡
Venezuela.....	Bolívar	29.850 7	3.350 000
Yugoslavia.....	Dinar	‡	‡

*As of end of July, 1948. †Equivalent of Chinese dollar. ‡Par value not yet established. §Equivalent of Turkish pound. **4 shillings, 11.553 pence.

world's currencies. When a member nation experiences a temporary shortage of foreign exchange—or the exchange of another member nation—it may borrow the required currency from the Monetary Fund. The Fund began stabilization operations in March 1947 and has (up to the end of May 1948) made loans totaling \$620.9 million, of which \$608.1 million have been in U. S. dollars. Stabilization loans have been made to Belgium, Chile, Denmark, France, India, Mexico, the Netherlands, Norway, Turkey and the United Kingdom. Table XIV shows the par values of currencies established with the Fund.

Trade Agreements

The economic warfare of the thirties brought distress to all of the nations of the world—to those imposing the trade restrictions as well as those against whom the restrictions were aimed. This economic warfare was one of the most potent causes of the Second World War.

The realization of this truth has influenced United States foreign policy during the postwar period. The United States has taken the lead in proposing the renunciation of economic warfare and a cooperative approach to the restoration of world trade and prosperity. The American program includes the mutual scaling down of tariffs under the Reciprocal Trade Agreements program, the establishment of an International Trade Organization and the adoption of a trade charter in which the nations of the world will agree to eliminate restrictive trade practices. It also includes exchange stabilization through the Monetary Fund, and loans, either direct or through the World Bank, to assist in the reconstruction of war-shattered economies and the development of industrially backward areas.

An outstanding achievement in the American program to bring about freer international trade was the conclusion on October 30, 1947 at Geneva of the General Agreement on Tariffs and Trade. The scope of the Agreement is indicated by the fact that the 23 participating countries accounted for more than three-quarters of the world's prewar international trade. The tariff concessions resulting from the Geneva negotiations list more than 45,000 separate items and cover approximately two-thirds of the trade between the participating countries.

As a result of the Geneva negotiations the U. S. obtained trade concessions from 21 foreign countries. On the basis of 1939 figures, concessions obtained by the United States on products of primary interest to American exporters affected about \$1,192 million of trade. We also received concessions on a long list of products (U. S. exports of which in 1939 exceeded \$200

million), of which the United States is not normally the major supplier. In addition, there was a substantial reduction of the preferences accorded British goods within Commonwealth markets.

The United States granted tariff concessions on products which accounted for imports into the United States from all countries valued at \$1,766 million in 1939. All of the countries which participated in the Geneva negotiations signed the General Agreement on Tariffs and Trade before the June 30, 1948 deadline except Chile. The countries whose mutual concessions have been made effective include: Australia, Belgium, Brazil, Burma, Canada, Ceylon, Chile, China, Cuba, Czechoslovakia, France, India, Lebanon, Luxemburg, the Netherlands, New Zealand, Norway, Pakistan, Southern Rhodesia, Syria, the Union of South Africa, the United Kingdom and the United States.

The Reciprocal Trade Agreements Act

TABLE XV
U. S. Trade Agreements Signed

Country	Signed	Effective
Cuba.....	Aug. 24, 1934	Sept. 3, 1934
Brazil.....	Feb. 2, 1935	Jan. 1, 1936
Belgium (and Luxemburg).....	Feb. 27, 1935	May 1, 1935
Haiti.....	Mar. 28, 1935	June 3, 1935
Sweden.....	May 25, 1935	Aug. 5, 1935
Colombia.....	Sept. 13, 1935	May 20, 1936
Canada (superseded).....	Nov. 15, 1935	Jan. 1, 1936
Honduras.....	Dec. 18, 1935	Mar. 2, 1936
The Netherlands.....	Dec. 20, 1935	Feb. 1, 1936
Switzerland.....	Jan. 9, 1936	Feb. 15, 1936
Nicaragua*.....	Mar. 11, 1936	Oct. 1, 1936
Guatemala.....	Apr. 24, 1936	June 15, 1936
France.....	May 6, 1936	June 15, 1936
Finland.....	May 18, 1936	Nov. 2, 1936
Costa Rica.....	Nov. 28, 1936	Aug. 2, 1937
El Salvador.....	Feb. 19, 1937	May 31, 1937
Czechoslovakia†.....	Mar. 7, 1938	Apr. 16, 1938
Ecuador.....	Aug. 6, 1938	Oct. 23, 1938
United Kingdom.....	Nov. 17, 1938	Jan. 1, 1939
Canada (second agreement).....	Nov. 17, 1938	Jan. 1, 1939
Turkey.....	Apr. 1, 1939	May 5, 1939
Venezuela.....	Nov. 6, 1939	Dec. 16, 1939
Cuba (first supplementary agreement).....	Dec. 18, 1939	Dec. 23, 1939
Canada (supplementary fox-fur agreement)†.....	Dec. 13, 1940	Dec. 20, 1940
Argentina.....	Oct. 14, 1941	Nov. 15, 1941
Cuba (second supplementary agreement).....	Dec. 23, 1941	Jan. 5, 1942
Peru.....	May 7, 1942	July 29, 1942
Uruguay.....	July 21, 1942	Jan. 1, 1943
Mexico.....	Dec. 23, 1942	Jan. 30, 1943
Iran.....	Apr. 8, 1943	June 28, 1944
Iceland.....	Aug. 27, 1943	Nov. 19, 1943
Paraguay.....	Sept. 12, 1946	Apr. 9, 1947

*The duty concessions and certain other provisions of this agreement ceased to be in force as of Mar. 10, 1938. †The operation of this agreement was suspended as of Apr. 22, 1939.

†This replaced a previous supplementary agreement relating to fox fur, signed on Dec. 30, 1939.

under which U. S. negotiations at Geneva were conducted was originally passed in 1934 and was last extended in 1948 for a one-year period. Under the provisions of the Act, the President is authorized to seek concessions from foreign countries for American trade and commerce in return for similar concessions granted their products by the United States. The President has the power to increase or decrease tariff rates (under the 1945 extension, those in effect on January 1, 1945) by 50 percent. Under the 1948 extension the Tariff Commission must advise the President and suggest limits beyond which concessions should not be made although the President is not bound by the Commission's advice.

Since 1934, reciprocal trade agreements have been concluded with 42 countries, with whom we did more than three-quarters of our normal foreign trade, and which include eight of our ten best customers in 1937. The effectiveness of the Act in promoting international trade and creating domestic employment is difficult to gauge because of the outbreak of the World War in 1939. However, between the years 1934-35 and 1938-39 our exports to trade agreement countries rose by 63 percent, while our exports to non-trade agreement countries rose by only 32 percent. Our imports from agreement countries increased by 22 percent and our imports from non-agreement countries by only 13 percent. The countries with which reciprocal trade agreements had been effected previous to the General Agreement on Tariffs and Trade are listed in Table XV.

Led by the United States, representatives of 53 nations signed the charter of the International Trade Organization* in Havana on March 24, 1948. The charter provides a set of rules under which world trade is to be conducted on a freer, non-

discriminatory basis. It seeks to outlaw economic warfare between nations. The charter provides that a U.N. agency, the International Trade Organization, is to be set up to administer the rules.

The charter contains 106 articles divided among 9 chapters. Nations adhering to the charter agree, subject to specified exceptions, to take appropriate action to maintain full employment; to avoid discrimination against the trade of other signatory countries; to reduce tariffs and other barriers to trade; to eliminate quotas and other quantitative restrictions on trade; to curb activities of cartels; to simplify customs regulations and other administrative barriers to trade; and to conduct state trading activities in accordance with commercial principles. The charter also makes provision for international cooperation to develop industrially backward areas and sets up principles governing the negotiation and operation of international commodity agreements.

The charter will become operative and the International Trade Organization will be set up 60 days after the charter has been ratified by a majority of the nations (27) which signed the charter at Havana. If a majority of the nations have not signed by March 24, 1949, the charter will become effective 60 days after the twentieth country ratifies the document. Unless a majority of the nations ratify it previously, however, the charter cannot become effective until March 24, 1949. If the charter has not become effective by September 30, 1949, the United Nations will ask the countries which have ratified if they want to bring the charter into effect as between themselves. Since the Senate will not act on the ratification of the charter until the next Congress, it is not expected that the charter will come into effect before 1949.

LABOR LEGISLATION IN 1948

1948 saw the first anniversary of the Taft-Hartley Law enacted June 23, 1947 over the President's veto. The Labor-Management Relations Act, 1947—the first major legislation in the labor field since the National Labor Relations Act, 1935—evoked contradictory views at the time of its enactment. Organized labor predicted a vast campaign to smash unionism, the return of the injunction and crippling suits for damages. Many advocates of the law hailed the rights guaranteed to the individual employee, the imposition of union responsibility and the partial insurance against nation-wide strikes.

The first year's experience disclosed that the biggest obstacles in the way of renegotiation of contracts was union security and the anti-Communist oath sections of

the new law. The effect of these two provisions produced several dramatic results. Unions such as the United Automobile Workers, CIO, gained strength at the expense of the United Electrical Workers, CIO, and other unions which failed to file the statutory affidavits. This produced a shift of interunion power and relative influence of union leaders. Further talk of closer cooperation, if not unity between AFL and CIO, was once more heard.

While the Taft-Hartley Act did bring a return of the injunctive process in labor disputes in limited situations, only some twenty injunctions were asked by NLRB. These involved mostly boycott situations. Use of the injunction in national emergency strikes resulted in a return of the coal miners to the pits after their March,

1948, walkout. A similar dispute at the Oakridge plant for atomic research and production resulted in a strike injunction for 80 days during which time a settlement was reached. A similar strike in the maritime industry which threatened to tie up all shipping on all the coasts and the Great Lakes was also enjoined.

Following are the significant provisions of the Taft-Hartley Law:

1. *National Labor Relations Board.* The new administrative agency consists of five members instead of the former Board of three. A new general counsel is invested with the authority to handle election and unfair labor practice proceedings.

2. *Union Security.* The closed shop is banned. The union shop and other forms of union security are closely regulated by means of NLRB conducted elections.

3. *Union Unfair Labor Practices.* For the first time unions are chargeable with unfair labor practices. These include coercion of employees in the choice of a bargaining agent; union attempts to discriminate against employees for dual union activities at permissible times; union refusal to bargain with an employer; and participation by the union in jurisdictional strikes or secondary boycotts.

4. *Suits Against Unions.* Unions may now be sued in federal courts, regardless of the amount involved and whether or not there is a diversity of citizenship. The principal basis of the suits are damages suffered as a result of violation of a collective bargaining agreement and of union participation in jurisdictional strikes or secondary boycotts.

5. *Collective Bargaining.* Collective bargaining rights of employees guaranteed by the Wagner Act remain unchanged. But the obligations of employers are more closely specified. Employers are permitted to petition NLRB for elections where they believe, in good faith, that the union no longer represents a majority. Employees may petition for an election to have their union "decertified."

6. *Negotiations and Cooling-Off Period.* Unions and employers are not permitted to

terminate or modify a contract without giving the other party 60 days' notice of such intention and without following certain notice and conference requirements.

7. *Freedom of Speech.* The right of an employer to state his views or arguments against unions is clarified by the new law. For instance, an employer may now make anti-union statements so long as they do not contain any threat of economic reprisal or offers of benefit.

8. *Supervisors.* Supervisors are denied the protections they formerly had under the Wagner Act. Employers no longer need bargain with supervisors' unions.

9. *National Emergency Strikes.* The Federal Government is authorized to protect the public where an industry-wide strike affects the national health and safety. Where there is a threat of such a strike, the President may direct the Attorney General to seek an injunction which may continue in force for as long as eighty days. Employees are given the opportunity to vote by secret ballot on acceptance or rejection of the employer's last offer of settlement.

10. *Checkoff.* Deduction of union dues from employee's pay is not permitted unless employee gives written authorization.

Portal-to-Portal Act

A Supreme Court decision (*Anderson v. Mt. Clemens Pottery Co.*) awarding back pay and liquidated damages under the Wage-Hour Law, for time spent in non-productive preparatory operations not normally compensated, led to an avalanche of lawsuits against employers. By January 1947 litigated claims totaled well over six billion dollars.

These suits led to the passage of the Portal-to-Portal Act on May 14, 1947. The new law set a federal statute of limitations of two years for future wage suits, outlawed "portal" claims except where based on contract, custom or practice, and gave employers the right to rely on official rulings under the law, without the risk of being held liable if a court later ruled that the original government interpretation or ruling was erroneous.

Terms Used in Labor Relations

ARBITRATION—Referring disputes between employers and employees to the binding decision of impartial referees, arbitrators, or umpires.

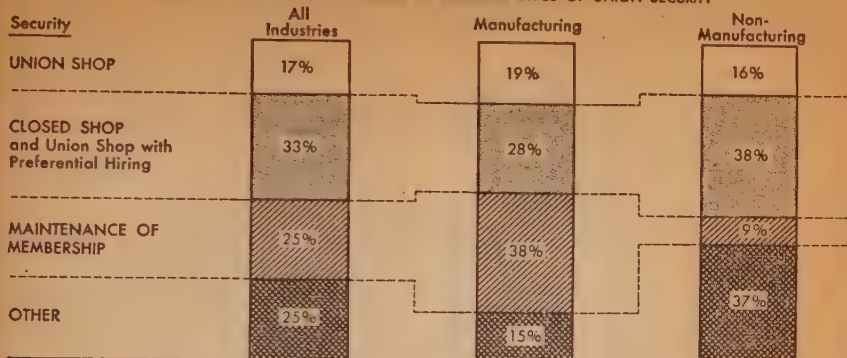
BARGAINING UNIT—A group of employees composed of workers in a single craft, plant, company, area, or industry for purpose of bargaining collectively with their employer or employers. Such units may be determined by traditional grouping of workers, or by NLRB or a state labor relations board.

BOYCOTT—A concerted effort by a union to withhold or induce others to withhold the purchase of goods or services of an employer involved in a labor dispute. *Secondary boycotts* generally apply to union efforts to induce parties not directly involved in a labor dispute to refrain from patronizing the employer with whom the union has a labor dispute.

CERTIFICATION—An official order of the National Labor Relations Board, the National Mediation Board, or a state labor

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relations board specifying that a union is free from employer domination, includes a majority of the employees in an appropriate unit in its membership, and is authorized to act as the collective bargaining agent for all the employees in the unit.

CHECKOFF—Employer deduction of union dues from the pay envelope of union members and payment of the funds to the union.

CLOSED SHOP—An employer may hire only members of the contracting union who must continue to remain members in good standing to keep their jobs.

CLOSED UNION—A union which, through high initiation fees or restrictive membership rules, seeks to limit the size of its membership in order to protect their job opportunities. (See *Union shop*.)

COLLECTIVE BARGAINING—The process of negotiation between employer and union for the purpose of reaching an agreement as to the terms and conditions of employment for a specified period.

COMPANY UNION—An employee organization whose membership is limited to the employees of a single plant or company. The term is frequently used to denote a company-dominated union, now illegal under the Wagner Act.

CRAFT UNION—Jurisdiction limited to one or several allied skilled trades.

EMPLOYEE WELFARE FUNDS—Funds consisting of employer or joint employer-employee contributions based upon percentage of payroll or number of units produced, used in behalf of union members for health insurance, hospitalization, vacations, disability, and retirement. Administration of the fund may be by union, employer, or jointly.

FEATHERBEDDING—Union work rules

which limit output or utilization of manpower of machines.

ILLEGAL STRIKE—A work stoppage by union members in violation of a no-strike clause, or one which has not been properly voted upon or authorized by the proper union officials.

JURISDICTIONAL DISPUTE—A dispute between two or more unions over the right to organize the employees in a particular trade, industry or plant.

LOCKOUT—A shutdown of operations by an employer to secure acceptance of his terms or in protest against union demands.

MAINTENANCE OF MEMBERSHIP—Employees who are union members at the time the contract is signed and those who subsequently join the union must continue their membership as a condition of continued employment during the contract term.

MEDIATION—The process of attempting to reach a settlement or an agreement through the efforts of an outside person or agency such as the U. S. Conciliation Service.

OPEN SHOP—Union membership is not a condition of employment.

PICKETING—Stationing one or more persons of a labor organization at the plant gates or shop doors of an employer during a labor dispute for the purpose of informing the public generally and the employees that a dispute exists, persuading workers to join or continue a strike, and preventing persons from entering or going to work. If large numbers participate in parading or walking up and down in front of the struck premises, this is known as *mass picketing*.

SENIORITY—Job rights based on length of service; measured in relation to other employees, to a particular job or to em-

employment in a department, division, plant, or company.

SHOP STEWARD—A person elected by the employees within a plant or department to represent them in the adjustment of grievances with the employer.

STRIKE—A temporary work stoppage by employees as a form of economic pressure to enforce a demand for wage increases, improved working conditions, or to secure action on a grievance.

UNFAIR LABOR PRACTICES—By employers. (1) Interference by employer with, restraint, or coercion of employees in the exercise of their right to self-organization and collective bargaining. (2) Employer domination or interference with the formation or administration of any labor organization or grant of financial or other support. (3) Discrimination in regard to hire or tenure of employment or any term or condition of employment by an employer in order to encourage or discourage membership in any labor organization. (4) The discharge or discrimination of an employee who files charges or gives testimony under the Act. (5) Refusal to bargain collectively with the representatives of employees.

By unions. (1) Restraining or coercing employees in the exercise of their Wagner

Act rights. (2) Charging excessive initiation fees. (3) Persuading an employer to discriminate against employees. (4) Refusing to bargain collectively. (5) Participation in secondary boycotts and jurisdictional disputes. (6) Strikes by minority unions against certified unions. (7) Requiring payment for services not rendered. (8) Coercing an employer in his selection of his bargaining representatives.

UNION SECURITY—The closed or union shop or maintenance of membership. (See each term.)

UNION SHOP—All employees after hiring or within a specified period must become and remain members of a union.

WORKMEN'S COMPENSATION—Insurance systems established by law in various states providing payment to workers who suffer physical injury during their course of employment, irrespective of carelessness of worker or negligence of employer.

YELLOW-DOG CONTRACT—An agreement signed by an employee with his employer as a condition of employment, setting forth the employee's promise that he would not join a labor union or otherwise participate in any concerted action. Such contracts are now outlawed by the NLRB under the terms of the Wagner Act.

Directory of Government Labor Agencies

Department of Labor—Principal operating units are: The Bureau of Labor Statistics, Division of Labor Standards, Wage and Hour and Public Contracts Divisions, Women's Bureau. Principal offices—Labor Department Building, Constitution Avenue at 14th Street, Washington, D. C. Secretary of Labor, Maurice C. Tobin.

1. Bureau of Labor Statistics: Acquires and distributes labor information and publishes the results of special studies on various aspects of the labor field, such as wages in different industries; effects of the war on employment, production, and labor conditions; productivity of labor and industry; and industrial relations. This information is issued in special bulletins and in the Monthly Labor Review. The Bureau maintains eight Regional Offices throughout the country with its principal office in the Labor Department Building, Wash., D. C.

2. Division of Labor Standards: Established in 1934 to develop desirable labor standards in industrial practice, labor law administration and labor legislation, and to make specific recommendations concerning methods and measures designed to improve the working conditions and the economic position of wage earners.

3. Wage and Hour and Public Contracts Divisions: Enforce minimum wage and overtime pay requirements of Federal laws.

4. Women's Bureau: Charged with formulat-

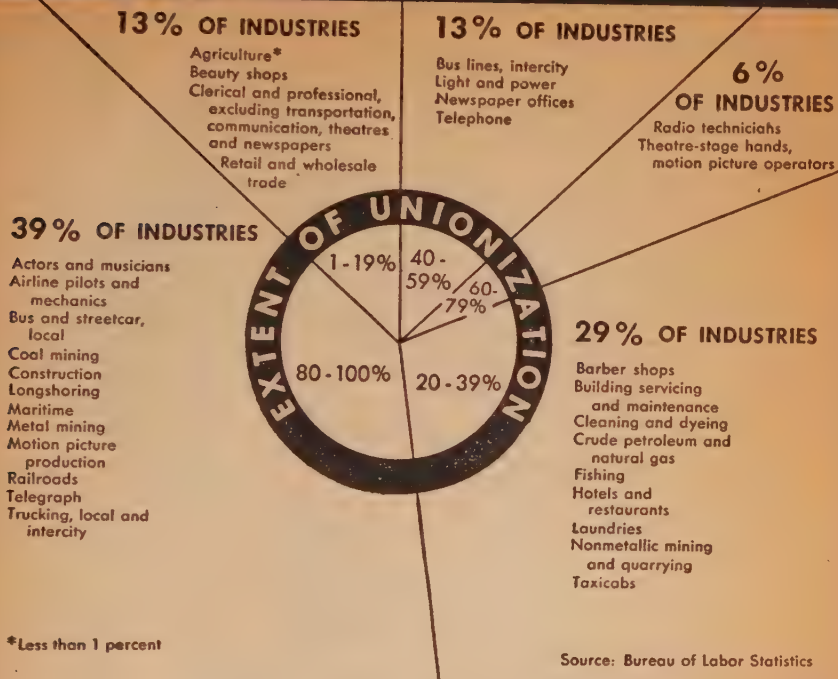
ing standards and policies for promoting the welfare of wage-earning women, improving their working conditions, increasing their efficiency, and advancing their opportunities for profitable employment. Chief of the Bureau: Frieda S. Miller, Dept. of Labor Bldg., Wash., D. C.

Mediation and Conciliation Service—An independent agency under the direction of a Federal Conciliation and Mediation Director appointed by the President with the advice and consent of the Senate. The main office of the Service is in the Department of Labor Building.

National Labor Relations Board—Principal office: Rochambeau Building, 815 Connecticut Avenue, N.W., Washington, D. C. The Taft-Hartley Law expanded the Board to five members: Paul M. Herzog, Chairman, John M. Houston and James J. Reynolds, Jr., all holdovers from the old NLRB. Additional members nominated for appointment by the President are J. Copeland Gray and Abe Murdock. The Board maintains 22 regional offices.

National Mediation Board—Composed of three members appointed by the President, not more than two of whom may belong to the same political party. The Board investigates disputes over representation and mediates disputes concerning changes in rates of pay, rules or working conditions of

PROPORTION OF WORKERS UNDER UNION CONTRACT IN 31 NON-MANUFACTURING INDUSTRIES



employees subject to the Railway Labor Act. Principal office: Federal Works Bldg., 18th and F Streets, N. W., Wash., D. C. The Board is composed of Harry H. Schwartz, George M. Cook, and Frank P. Douglass. (See *Labor Legislation*.)

National Railroad Adjustment Board—Settles grievances and disputes arising out of interpretation of agreements concerning pay, rules or working conditions.

The Chairman of this Board is C. E. Peck; the vice chairman is H. J. Carr.

Labor Organizations

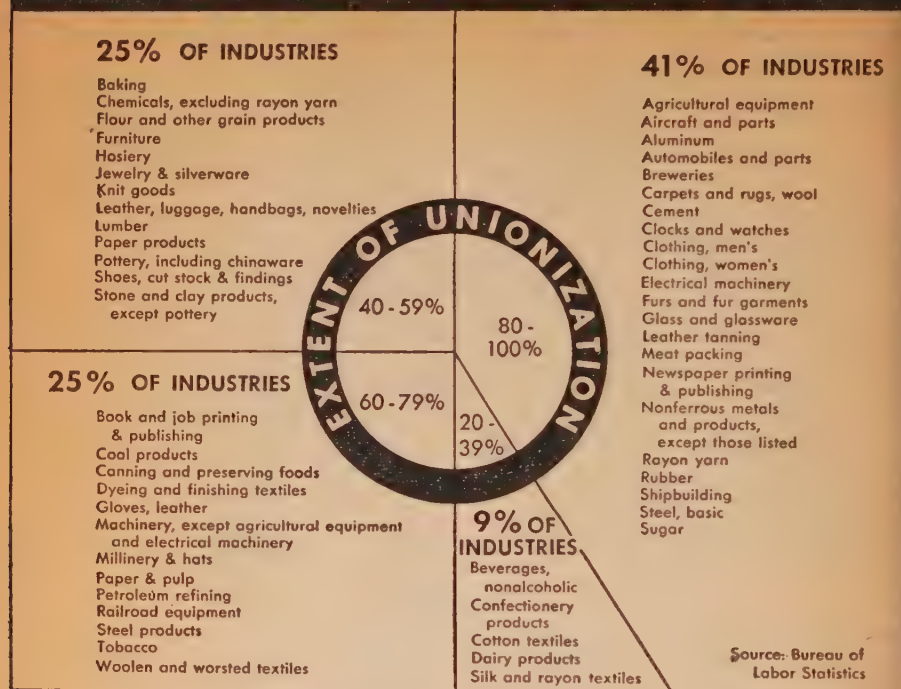
THE AMERICAN FEDERATION OF LABOR

The American Federation of Labor was founded in 1881 as the Federation of Organized Trades and Labor Unions of the United States and Canada, changing its name in 1886. Its basic approach was to organize workers by crafts and skills, rather than by geographical area as was the practice of the Knights of Labor which the AFL was successful in replacing. The present organizational structure is practically identical with that set up under the leadership of Samuel Gompers, president of the Cigar Makers International Union. The AFL is financed by per capita dues from each of the affiliated international unions which are autonomous, self-governing bodies. The Federation, however, has authority to fix the jurisdiction of its affiliated in-

ternationals, though it is not always able to enforce decisions. Federation officers are elected by annual conventions. The governing body between conventions is the Executive Council, elected by the convention.

The AFL now consists of a little more than 105 international unions, claiming a membership of approximately 7,200,000. Its principal activities are to aid constituent unions in organizing and bargaining, to promote or oppose legislation, litigate test cases in court, watch interpretation and enforcement of laws, represent its affiliates in tripartite government agencies, and act for its membership in international bodies. It also operates through city and state federations, and through councils or departments of allied crafts. The AFL has refrained from tying itself up too closely

PROPORTION OF WORKERS UNDER UNION CONTRACT IN 53 MANUFACTURING INDUSTRIES



with any political party or government administration. Most constituent AFL unions are craft unions although a number are industrial. By extension into a number of industries some of the original craft unions have become mixed unions. The Brotherhood of Painters, Decorators, and Paper Hangers of America, AFL, is an illustration of a craft union whose jurisdiction includes building construction and maintenance work in establishments in many industries. Address: 901 Massachusetts Ave., N. W., Washington, D. C.

OFFICERS

AND EXECUTIVE COUNCIL OF AFL—1947

William Green, President

George Meany, Secretary-Treasurer

W. L. Hutcheson

W. D. Mahon

Matthew Woll

W. C. Birthright

Joseph N. Weber

W. C. Doherty

Geo. M. Harrison

David Dubinsky

Daniel J. Tobin

Charles J. MacGowan

Harry C. Bates

Herman Winter

Daniel W. Tracy

CONGRESS OF INDUSTRIAL ORGANIZATIONS

The CIO resulted from a split within the AFL ranks. In order to organize the mass production industries, leaders of the industrial unions within the AFL won approval at the Federation's San Francisco convention in 1934 of a resolution endorsing industrial unionism in the automobile, cement, aluminum, and other mass-production industries. Failure of the AFL to organize the mass-production industries finally brought on a crisis at the 1935 convention at Atlantic City. Less than a month after this convention closed, led by John L. Lewis, Sidney Hillman, and David Dubinsky, the United Mine Workers, the Amalgamated Clothing Workers, the International Ladies Garment Workers Union, the United Textile Workers, the Oil Field, Gas and Refinery Workers, the International Union of Mine, Mill, and Smelter Workers founded the Committee for Industrial Organization. Other industrial unions shortly joined the Committee. In January, 1936, the Executive Council of the AFL ordered the CIO to dissolve and in August, upon its refusal to do so, suspended the ten unions. Disagreement on

the desirability of reunification of labor led the ILGWU to return to the AFL, with John L. Lewis' UMW following suit later.

At present the Congress of Industrial Organizations includes 37 international unions with a claimed membership of approximately 6,000,000. The CIO has emphasized legislation as an aid to organization and collective bargaining drives. It has also formed a Political Action Committee to support candidates seeking public office whom it regards as pro-labor.

The CIO is financed by per capita dues from each of the affiliated international unions which are autonomous, self-governing bodies, as in the AFL. Unlike the AFL, however, the parent organization has greater influence over the decisions of the individual unions. The CIO is governed by a General Executive Board, consisting of a representative from each international union. A smaller body of officers is elected by the annual convention. CIO headquarters: 718 Jackson Pl., Wash. 6, D. C.

OFFICERS OF CIO—1947

Philip Murray	President
Walter P. Reuther	Vice President
L. S. Buckmaster	Vice President
Joseph Curran	Vice President
Albert J. Fitzgerald	Vice President
John Green	Vice President
Allan S. Haywood	Vice President
Emil Rieve	Vice President
Frank Rosenblum	Vice President
O. A. Knight	Vice President
James B. Carey	Secretary-Treasurer

INDEPENDENT UNIONS—It is generally estimated that 2,500,000 workers are organized in independent unions, many of them operating only as company- or plant-wide unions. Some are loosely united in the Confederated Unions of America, whose central headquarters are located at 809 "I" Street, N. W., Washington, D. C. The most important of the independents, however, are organized much like the international unions of the AFL and CIO, some of them having withdrawn from the AFL.

1. Railroad Brotherhoods. The most prominent of the railroad unions are the four independent train service unions, commonly referred to as the "Brotherhoods." Labor organization in the railroads is predominantly along craft or occupational lines. The "Big Four" unaffiliated unions represent craft elements in the industry. They include the Brotherhood of Locomotive Firemen and Enginemen, Brotherhood of Railroad Trainmen, Grand International Brotherhood of Locomotive Engineers, and the Order of Railway Conductors of America. Membership figures for the "Big Four" unaffiliated unions are as follows: Railway Conductors—38,329;

Locomotive Firemen and Enginemen—111,119; Railroad Trainmen—216,025; Locomotive Engineers—76,000. All told, however, there are about 1,400,000 employees on Class 1 railroads and some 23 so-called standard railroad unions. All except about 70,000 employees are covered by union agreements, so that approximately 95 percent were employed under contracts.

The railroad unions, except for the Railroad Trainmen and the Locomotive Engineers, attempt some form of united action through the Railway Labor Executives Assn., which includes some AFL unions.

2. International Association of Machinists. Claiming a membership of 624,000, was formerly affiliated with the AFL. After one withdrawal it was readmitted, during the 1944 convention, but withdrew again in 1946 as a result of a jurisdictional dispute with the Brotherhood of Carpenters and the Sheet Metal Workers International Association. IAM Hqt. are at 9th St. and Mt. Vernon Pl., N. W., Washington, D. C.

3. Foreman's Association of America. The organization of supervisors became an active issue after the effective organization of production workers by the newly organized industrial unions. In 1941, foremen from numerous Detroit automobile plants organized an independent union, the Foreman's Association of America, which later expanded its membership into other industries and areas. FAA obtained a contract from the Ford Motor Company in 1943 but met with resistance from other auto manufacturers. Organizational activities were aided by the decision of the National Labor Relations Board in 1945, holding that foremen were entitled to bargain collectively under the Wagner Act.

This trend was reversed by passage of the Taft-Hartley Law in June, 1947. By amendment of the Wagner Act, it eliminated supervisors from the statutory definition of employee, thereby denying organizational protection and mandatory collective bargaining rights to classes of supervisory employees. Shortly after this happened, FAA lost 13 of its chapters, including its largest group, at Packard. The union now claims 95 chapters. Its headquarters are located at 515 Barlum Tower, Detroit.

4. Communication Workers of America. This union was formerly the National Federation of Telephone Workers. The present group represents an attempt to create a more centrally organized union. The telephone strike in 1947 resulted in a split. The American Union of Telephone Workers (long lines) and some others formed the CIO Telephone Workers Organizing Committee. A few unions formerly affiliated with NFTW are now affiliated with the International Brotherhood of Electrical Workers (AFL). They claim a membership of 173,000. Headquarters: 917 G St., N.W., Washington 1, D. C. Others remain independent.

Membership of Leading American Labor Unions

Source: Bureau of Labor Statistics.

Name of union	Affiliation	Date	Number of members
Amalgamated Clothing Workers.....	CIO	1947	365,000
Amalgamated Meat Cutters and Butcher Workmen.....	AFL	1947	196,872
American Federation of Musicians.....	AFL	1947	232,371
Bakery and Confectionery Workers' International Union.....	AFL	1947	173,134
Brotherhood of Locomotive Firemen and Enginemen.....	Ind.	1947	111,119
Brotherhood of Maintenance of Way Employees.....	AFL	1947	156,300
Brotherhood of Painters, Decorators and Paperhangers.....	AFL	1947	170,200
Brotherhood of Railroad Trainmen.....	Ind.	1947	216,025
Brotherhood of Railway and Steamship Clerks.....	AFL	1947	350,000
Building Service Employees' International Union.....	AFL	1947	152,000
Communications Workers of America.....	Ind.	1947	173,000
Hotel and Restaurant Employees' International Alliance.....	AFL	1947	402,331
Industrial Union of Marine and Shipbuilding Workers.....	CIO	1946	200,000 represented ¹
International Association of Machinists.....	Ind.	1947	624,000
International Brotherhood of Boilermakers.....	AFL	1947	166,700
International Brotherhood of Electrical Workers.....	AFL	1947	330,000
International Brotherhood of Teamsters.....	AFL	1947	1,062,000
International Hod Carriers', Building and Common Laborers' Union.....	AFL	1947	267,500
International Ladies' Garment Workers' Union.....	AFL	1947	380,000 in good standing ²
International Union of Mine, Mill and Smelter Workers.....	CIO	1947	108,625 in good standing ³
Retail, Wholesale and Department Store Union.....	CIO	1947	145,000
Textile Workers Union.....	CIO	1947	390,385 represented
United Association of Plumbers and Steam Fitters.....	AFL	1946	201,000
United Automobile, Aircraft and Agricultural Implement Workers.....	CIO	1947	920,857 ⁴
United Brotherhood of Carpenters and Joiners.....	AFL	1947	737,514 ⁵
United Electrical, Radio and Machine Workers.....	CIO	1945	700,000 represented
United Mine Workers.....	AFL	1947	600,000 in good standing ⁶
United Rubber, Cork, Linoleum and Plastic Workers.....	CIO	1947	208,942 in good standing ⁷
United Steelworkers.....	CIO	1947	928,670 ⁸
United Telephone Organizations.....	Ind.	1947	12,300

¹Subject to decline in shipbuilding industry. ²Members do not lose good standing till they are nine months in arrears in dues. ³Includes members exonerated from dues: on strike, on sick leave, in armed services. ⁴Average for 1945. Membership lower at end of 1945. ⁵All active members. ⁶Includes members exonerated from dues. ⁷Includes 4-5,000 who were out of work because of illness, etc. ⁸Excludes 61,200 exonerated members and 66,900 in armed forces.

State Labor Relations Laws

Anti-strike legislation was passed by a number of states in 1947 legislative sessions. Only three states dealt with the ordinary strike: Delaware, Michigan and Missouri require strike votes or notices. But jurisdictional strikes are banned or restricted in California, Iowa, Michigan, Missouri, Pennsylvania and Wisconsin. Sit-down strikes were prohibited by Delaware, South Dakota and Utah. Missouri and North Dakota forbade unions to engage in sympathy strikes. Public employees cannot strike in Michigan, Missouri, Nebraska, New York, Ohio, Pennsylvania and Texas, while Minnesota denied the right to employees of charitable hospitals. A number outlawed secondary boycotts: California, Delaware, Idaho, Iowa, Minnesota, Missouri, North Dakota, Oregon, Pennsylvania, Texas and Utah. The right of a majority of employees to peacefully picket the employer's premises was not disturbed, except in the case of public employees or those working for public utilities. But these states made mass picketing illegal: Delaware, Georgia, Michigan, South Dakota, Texas and Utah. Violent picketing is

banned in Georgia, Michigan and South Dakota. A minority union may not picket in Delaware, North Dakota or Utah; and "stranger" picketing is not allowed in Missouri, Pennsylvania, South Dakota and Texas. It is unlawful to picket the homes of employees in Connecticut and Michigan.

There was little legislative activity in 1948. A popular referendum in North Dakota approved a waiting period and strike vote requirement, as well as bans on stranger or minority picketing, boycotts and sympathy strikes. Louisiana reversed a trend by repealing a statute regulating union activity which had outlawed wildcat strikes in violation of a contract. State courts also nullified some of the 1947 enactments. California's Supreme Court declared the ban on "hot cargo" and secondary boycotts unconstitutional. A lower court reached the same conclusion with respect to California's prohibition of jurisdictional strikes. Michigan's strike vote requirement was held invalid by a state circuit court. The Supreme Court of Missouri overthrew a ban on "stranger" picketing.

THE FEDERAL TAX SYSTEM

The Internal Revenue Code is the basic tax law of the Federal Government. Although it provides for many types of taxes such as gift, estate, manufacturers' excise, document, etc., its chief feature is the income tax, both individual and corporate.

Combined Tentative Normal Tax and Surtax Before Percentage Reductions

More than	Net income after deductions and exemptions of	But not over	Tax on lower amount	Percent applicable to excess
\$		\$		
0		2,000	0	20%
2,000		4,000	400	22%
4,000		6,000	840	26%
6,000		8,000	1,360	30%
8,000		10,000	1,960	34%
10,000		12,000	2,640	38%
12,000		14,000	3,400	43%
14,000		16,000	4,260	47%
16,000		18,000	5,200	50%
18,000		20,000	6,200	53%
20,000		22,000	7,260	56%
22,000		26,000	8,380	59%
26,000		32,000	10,740	62%
32,000		38,000	14,460	65%
38,000		44,000	18,360	69%
44,000		50,000	22,500	72%
50,000		60,000	26,820	75%
60,000		70,000	34,320	78%
70,000		80,000	42,120	81%
80,000		90,000	50,220	84%
90,000		100,000	58,620	87%
100,000		150,000	67,320	89%
150,000		200,000	111,820	90%
200,000			156,820	91%

(If the income includes any partially exempt interest, the tax is reduced by 3 percent of that interest, or by 3 percent of net income, if less than the interest.)

Individual Taxes

Individual tax rates for the calendar year 1948 are: normal tax at 3 percent, and surtax scaled from 17 percent to 88 percent. The combined normal tax and surtax are shown in the table above.

The total of combined tentative normal tax and surtax is reduced in accordance with the following to give actual tax due:

If the combined tentative tax is:

Reduce it by:

Not over \$400	17%
Over \$400 but not over \$100,000	\$68 plus 12% of the amount over \$400
Over \$100,000	\$12,020 plus 9.75% of amount over \$100,000

For example, if there is a combined tentative tax of \$1,960 on taxable income of \$8,000, the tentative tax amount falls into the second bracket of the percentage reduction table—over \$400 but not over \$100,000. The \$1,960 tentative tax will therefore be reduced by \$68 plus 12% of the amount over \$400. Twelve percent of \$1,560 (the amount over \$400) is \$187.20. The total reduction is therefore \$255.20

(=\$68 plus \$187.20). Subtracting that amount from the \$1,960 tentative tax, the final actual tax is \$1,704.80.

(No individual need pay a total tax greater than 77% of his net income.)

Husband-wife Income Splitting.

A husband and wife, regardless of whether they live in a community property or a non-community property state, are entitled to split their combined income for tax purposes by filing a joint return.

Where one spouse earns more than the other, the exercise of this privilege to split income will almost always result in a lower tax burden by subjecting the income to lower surtax rates.

The actual method of computing the "split-income" tax on a joint return is to arrive at the taxable net income and divide that in half. The tax is then calculated on half. The final tax due is double the amount of tax figured on one-half. Note that a husband and wife are entitled to split their income for tax purposes even though the wife has neither income nor deductions of her own.

To show how the split income computation is made, assume a married taxpayer has a net income of \$12,000 after deductions and exemptions. He files a joint return with his wife. In figuring the tax, he divides the \$12,000 income in half. He then computes the tax on \$6,000. This equals \$1,176.80. He then multiplies that amount by two to arrive at the final tax liability of \$2,353.60.

Deductions:

In computing taxable net income, the taxpayer has the choice of using either the actual deductions incurred by him, such as: interest, taxes, contributions, etc., or the optional standard deduction. The optional deduction is used in place of actual deductions and amounts to roughly 10 percent of the taxpayer's income after business and employment expenses have been deducted. However, the maximum optional deduction is \$1,000 for single persons or married people filing joint returns and only \$500 for married persons filing separate returns.

Exemptions:

The same exemptions are allowed in calculating both the normal tax and the surtax. The taxpayer is entitled to a \$600 exemption for himself and each of his dependents. To claim someone as a dependent you must furnish over half the money spent for his support, his taxable income must be less than \$500, and he must be closely related to you. These are considered "close" relatives:

Son and daughter (including an adopted child), grandchild, great-grandchild, etc.

Stepchild

Son-in-law and daughter-in-law

Parents, grandparents, etc.

Stepfather and stepmother

Father-in-law and mother-in-law

Brother, sister, half-brother, half-sister

Brother-in-law and sister-in-law

Uncle, aunt, nephew and niece (but not if related to you only by marriage)

The taxpayer's wife is entitled to a \$600 exemption for normal tax and for surtax, whether on a separate or a joint return. But the husband may claim his wife's \$600 exemption on *his separate return* if she has no income and is not claimed as a dependent by another taxpayer.

Any taxpayer 65 years or older is entitled to a special \$600 exemption *in addition* to his regular \$600 personal exemption. An additional \$600 exemption is also available where a taxpayer's spouse reaches 65. To get this additional exemption, the taxpayer himself need not be 65. If both are 65 or over, there will be two additional exemptions of \$600 each, one for the husband and one for the spouse.

A blind taxpayer is entitled to a \$600

special exemption (instead of the \$500 deduction allowed before 1948). This exemption for the blind is in addition to the \$600 personal exemption and the \$600 old age exemption. A special \$600 exemption is also available for a spouse who is blind even though the taxpayer is not. This exemption also is in addition to the spouse's personal and old age exemptions.

The extra old age exemption and exemption for the blind are available only to a taxpayer and his spouse. There is no additional \$600 exemption for supporting a dependent who is 65 or over or blind.

How income tax is collected:

To keep the collection of individual taxes on a current basis, two devices are used: (1) the withholding tax and (2) the declaration and payment of estimated tax. Withholding simply makes employers agents of the government in collecting taxes from employees. Through the use of withholding tables, the tax on an employee's salary is roughly calculated. A proportionate amount of the tax is then deducted from each payment of salary to the employee. If at the end of the year, it appears that too much has been withheld, the employee gets a tax refund; if not enough has been withheld, the employee sends in the difference with his tax return.

Since the wage withholding method doesn't place on a current basis taxpayers receiving dividends, interest, profits from business, etc., and wage earners whose tax will exceed the amount withheld on wages, these taxpayers file a declaration at the beginning of the year estimating their current year's taxes and pay it in quarterly installments. Just as in the case of withholding, any overpayment or underpayment of tax is adjusted in the return covering the entire year.

Who must file a return:

If you've earned \$600 or more during the year you must file a return. This is required whether you're single, married, divorced, widowed or under 21. Also, if you earned less than \$600 but received other income from interest, dividends, rents, pensions, etc., which brings your income up to \$600, a return is required.

Members of the armed services below the rank of commissioned warrant officer do not include any of their military or naval pay in deciding whether to fill out a return. Officers exclude the first \$1,500 of service pay in deciding if they file.

This special exclusion for members of the armed forces is scheduled to end with the taxable year 1948.

What form to use:

FORM 1040 A. Lower bracket taxpayers whose earnings are primarily from salaries may file a simplified Form 1040 A. This

eliminates the necessity of any tax computation by the taxpayer, since the collector computes the actual amount of tax liability. His calculation will be on the basis of the tax table which is part of Form 1040, and which automatically allows the standard deduction of approximately 10%. If any additional tax is due, the collector will send the taxpayer a bill for the amount. If the amount of taxes withheld from wages plus any amount paid as an estimated tax exceed the total tax due, a refund will be sent to the taxpayer.

FORM 1040. Every individual who does not meet all the requirements of Form 1040 A, or who wants to make his own computations, must use Form 1040. If his adjusted gross income is less than \$5,000 and he is otherwise qualified, he may convert the form into a "short" form by tearing off pages 3 and 4, filing only pages 1 and 2. If he does so, he must use the tax table method of computing his tax liability.

Partnerships:

A partnership as such does not pay tax. Instead the individual partners pick up their share of the partnership net profit or loss and report it in their individual returns.

Estates and trusts:

Every fiduciary (except a receiver who is in possession of only part of an individual's property), or one or two or more joint fiduciaries must file a return for the following individuals, estates and trusts for which he acts:

- (a) Every individual whose gross income for the taxable year is \$600 or more;
- (b) Every estate which has a gross income of \$600 or more;
- (c) Every trust which has a net income of \$100 or more, or which has a gross income of \$600 or more;
- (d) Every estate or trust of which any beneficiary is a nonresident alien.

Corporation Taxes

Corporations are now subject to the following tax rates:

Earnings up to \$25,000	
Normal tax	
First \$5,000	15%
Next 15,000	17%
Next 5,000	19%
Surtax	6%
Earnings between \$25,000 and \$50,000	
Normal tax	\$4,250 plus 31% of normal tax net income over \$25,000
Surtax	\$1,500 plus 22% of surtax net income over \$25,000

Earnings over \$50,000

Normal tax	24%
Surtax	14%

There is no longer an excess profits tax, capital stock tax or declared value excess profits tax. However, the 27½ percent-38½ percent penalty surtax on corporations which unreasonably accumulate earnings to avoid the surtax on individual stockholders is still in effect.

Gift Tax

Individuals who make gifts are subject to a gift tax based on the value of the property given. However, exemption is provided for a certain amount of gifts and the tax does not apply until the exemption is exceeded. The exemptions work this way:

During his lifetime, an individual may give away \$30,000 taxfree. In addition, the first \$3,000 of gifts made by him to each person in any one year is also exempt. For example, a taxpayer may give his wife and child \$3,000 apiece each year without incurring gift tax and without using up any of his \$30,000 lifetime exemption.

Gifts by husbands and wives:

With respect to gifts made on or after April 2, 1948, husbands and wives will be entitled to certain special tax advantages regardless of whether the taxpayers live in a community property or a non-community property state.

1. *Gifts between husband and wife:* On every gift made from husband to wife, or vice versa, in a non-community property state, the donor will be entitled to a "marital" deduction equal to one-half the value of the gift. This, in effect, reduces the taxable value of the gift by one-half. Gifts of this type in community property states are treated the same way by virtue of the local community property law. In other words, since under the community property law the wife would be considered to own one-half of any community property given to her by her husband, the taxable value of the husband's gift would be only one-half the value of the community property transferred to the wife.

2. *Gifts by husband and wife to third persons:* A husband and wife in a non-community property state are entitled to "split" gifts made by either of them to some third person, if the other spouse consents to such splitting. The effect of this privilege is to treat a gift made by the husband, for example, as though made one-half by him and one-half by his wife. The resulting tax advantage is that the husband and wife have two full sets of gift tax exemptions and exclusions to apply against a gift which is really made by only one of them.

In community property states this consequence follows as a matter of local com-

After deducting exemptions, the value of gifts is taxed at the following rates:

(A)	(B)	(C)	(D)
Amount of net gifts equaling—	Amount of net gifts not exceeding—	Tax on amount in column (A)	Rate of tax on excess over amount in column (A) Percent
.....	\$ 5,000	.....	2½
\$ 5,000	10,000	\$ 112.50	5½
10,000	20,000	375.00	8¼
20,000	30,000	1,200.00	10½
30,000	40,000	2,250.00	13½
40,000	50,000	3,600.00	16½
50,000	60,000	5,250.00	18¾
60,000	100,000	7,125.00	21
100,000	250,000	15,525.00	22½
250,000	500,000	49,275.00	24
500,000	750,000	109,275.00	26¼
750,000	1,000,000	174,900.00	27¾
1,000,000	1,250,000	244,275.00	29¼
1,250,000	1,500,000	317,400.00	31½
1,500,000	2,000,000	396,150.00	33¾
2,000,000	2,500,000	564,900.00	36¾
2,500,000	3,000,000	748,650.00	39¾
3,000,000	3,500,000	947,400.00	42
3,500,000	4,000,000	1,157,400.00	44¼
4,000,000	5,000,000	1,378,650.00	47¼
5,000,000	6,000,000	1,851,150.00	50¼
6,000,000	7,000,000	2,353,650.00	52½
7,000,000	8,000,000	2,878,650.00	54¾
8,000,000	10,000,000	3,426,150.00	57
10,000,000	.....	4,566,150.00	57¾

A gift tax return (Form 708) and payment of the tax are due on March 15th following the close of the calendar year in which the taxable gifts are made.

munity property law, with both husband and wife considered the equal donors of any community property given by either one of them to a third person.

Estate Tax

The estate tax is based on the net value of an individual's property which is transferred to others as a result of his death. The calculation of the actual estate tax due is somewhat complicated by the necessity of figuring two separate taxes.

The net tax payable is: (1) the estate tax, consisting of (a) the gross tax computed under Schedule I less (b) the credits allowable against such tax, plus (2) the additional estate tax, consisting of (a) the tentative tax computed under Schedule II less (b) the credits allowable against such tentative tax:

(1) *The estate tax* (1926 Act as amended—specific exemption of \$100,000 in determining net estate).

(a) Schedule I:

	Percent
First \$50,000 of net estate	1
<i>In excess of</i>	
\$50,000 up to \$100,000	2
100,000 " " 200,000	3
200,000 " " 400,000	4
400,000 " " 600,000	5

<i>In excess of</i>		Percent
600,000 " "	800,000	6
800,000 " "	1,000,000	7
1,000,000 " "	1,500,000	8
1,500,000 " "	2,000,000	9
2,000,000 " "	2,500,000	10
2,500,000 " "	3,000,000	11
3,000,000 " "	3,500,000	12
3,500,000 " "	4,000,000	13
4,000,000 " "	5,000,000	14
5,000,000 " "	6,000,000	15
6,000,000 " "	7,000,000	16
7,000,000 " "	8,000,000	17
8,000,000 " "	9,000,000	18
9,000,000 " "	10,000,000	19
10,000,000		20

(b) Credits:

(1) The amount of gift taxes paid under the Gift Tax Act of 1932 on gifts by the decedent which must be included in his gross estate, not in excess of the proportion of the gross tax computed under the above schedule which the value of the gift property bears to the value of the gross estate.

(2) The entire amount of gift taxes paid under the Revenue Act of 1924 on gifts by the decedent which must be included in his gross estate.

(3) The amount of succession taxes paid to any state or territory in respect to property included in the gross estate, not

exceeding 80 percent of the tax computed under Schedule I before deducting credits Nos. 1 and 2.

(2) *The additional estate tax* (1932 Act as amended—specific exemption of \$60,000 in determining net estate).

(a) *Schedule II:*

First \$5,000		Tax on lower amount	Percent on excess
Net estate			3
\$5,000 to	\$10,000	\$150	7
10,000 "	20,000	500	11
20,000 "	30,000	1,600	14
30,000 "	40,000	3,000	18
40,000 "	50,000	4,800	22
50,000 "	60,000	7,000	25
60,000 "	100,000	9,500	28
100,000 "	250,000	20,700	30
250,000 "	500,000	65,700	32
500,000 "	750,000	145,700	35
750,000 "	1,000,000	233,200	37
1,000,000 "	1,250,000	325,700	39
1,250,000 "	1,500,000	423,200	42
1,500,000 "	2,000,000	528,200	45
2,000,000 "	2,500,000	753,200	49
2,500,000 "	3,000,000	998,200	53
3,000,000 "	3,500,000	1,263,200	56
3,500,000 "	4,000,000	1,543,200	59
4,000,000 "	5,000,000	1,838,200	63
5,000,000 "	6,000,000	2,468,200	67
6,000,000 "	7,000,000	3,138,200	70
7,000,000 "	8,000,000	3,838,200	73
8,000,000 "	10,000,000	4,568,200	76
10,000,000 "	and over	6,088,200	77

(b) *Credits:*

(1) The gross tax under Schedule I.

(2) The amount of gift taxes paid under the Gift Tax Act of 1932 on gifts by the decedent which must be included in his gross estate, not credited against the estate tax under Schedule I and not in excess of the proportion of the tentative tax under Schedule II less the gross tax under Schedule I which the value of the gift property bears to the gross estate.

If the gross estate of decedent dying after October 31, 1942, exceeds \$60,000 (insurance included), the legal representative is required to file notice within 2 months after qualification and to file a return within 15 months after decedent's death. Tax is due within 15 months after decedent's death on Form 706. Tax is to be paid by the legal representative out of estate funds. Taxes unpaid after 15 months from the date of death draw interest at 6 percent per annum, except that where an extension of time for payment is granted is 4% for a period beginning 18 months after date of death until end of extension period.

Effective with respect to decedents dying on or after January 1, 1948, property left by a husband to his wife, or vice versa, will generally be treated the same for estate tax purposes whether the taxpayer

dies in a community property or in a non-community property state.

In non-community property states this result is accomplished by means of a new "marital" deduction. Upon the death of husband or wife, the entire value of whatever passes to the surviving spouse outright is deductible from the gross estate subject, however, to the following ceiling—the deduction may not exceed 50% of the gross estate reduced by deductible claims and expenses.

In community property states the same result is obtained by giving effect to the local community property law which usually treats one-half of the community property as already belonging to the wife. Therefore, only one-half of the community property left by the husband to his wife is taxable in his estate.

Excise Taxes

Manufacturers' excise taxes based upon the amount of sales made by a manufacturer are levied at the following rates:

Automobile truck chassis and bodies	5%
Passenger automobile chassis and bodies, including motorcycles	7%
Parts and accessories	5%
Firearms, shells and cartridges	11%
Gasoline, per gallon	\$.015
Tires, per lb.	.05
Inner tubes, per lb.	.09
Lubricating oils, per gallon	.06
Matches:	
fancy wooden, per 1,000	.055
ordinary, per 1,000	.02
Mechanical refrigerators	10%
Pistols and revolvers	11%
Radio receiving sets and parts	10%
Musical instruments, phonographs and records	10%
Sporting goods	10%
Electric, gas, and oil appliances	10%
Photographic apparatus	25%
Unexposed photographic films, plates and paper	15%
Business and store machines	10%
Electric light bulbs	20%
Oleomargine:	
Yellow, per lb.	\$.10
Not yellow, per lb.	.0025

Retailers' excise taxes based on sales by retailers are levied as follows:

Jewelry	20%
Furs	20%
Toilet preparations	20%
Luggage, etc.	20%
Watches with retail price of \$65 or less	10%
Alarm clocks with retail price of \$5 or less	10%

Stamp taxes on original issue and transfer of securities are as follows:

Bonds:

issue, per \$100 face value or fraction	\$.11
transfer, per \$100 face value or fraction	.05

Excise Taxes—(cont.)

Stocks:
issue
par value, per \$100 or fraction... \$11
no par value, per \$20 of actual value or fraction where less than \$100 per share03
no par value, per \$100 of actual value or fraction where more than \$100 per share11
transfer
par value, per \$100 aggregate face value or fraction:
selling price less than \$20 a share05
selling price more than \$20 a share06
no par value, per share:
selling price less than \$20 a share05
selling price more than \$20 a share06

Admissions and dues are taxed on the basis of the admissions and the dues paid:

Admissions:
per \$.05 or major fraction \$.01
charges in excess of estab. price by other than ticket offices, on excess 20%
by proprietors and employees, on excess 50%
lease of boxes or seats, on equivalent box office price 20%
cabarets, roof gardens and similar entertainment 20%

Dues:
annual dues in excess of \$10 20%
initiation fees over \$10 20%
Telephone, telegraph, radio and cable facilities are taxed on the amount of charge for the services:
Telephone conversations
\$.25 and over 25%

A 15% tax is levied upon amount paid by subscribers for local telephone service and for toll charges of less than 25 cents.
Telegraph messages 25%
Radio and cable messages 25%
Leased wire or special services 25%

Intern'l dispatches and messages ... 10%
Wire and equipment services 8%
Leases of safe deposit boxes are taxed on the basis of the amount paid for use of the box:
On lease price 20%
Tobacco taxes are as follows:
Cigars:
weighing not over 3 lbs. per M .. \$.75
weighing over 3 lbs. per M
if retail price 2½¢ or less 2.50
if retail price over 2½¢ up to 4¢ 3.00
if retail price over 4¢ up to 6¢ 4.00
if retail price over 6¢ up to 8¢ 7.00
if retail price over 8¢ up to 15¢ 10.00
if retail price over 15¢ up to 20¢ 15.00
if retail price over 20¢ 20.00
Cigarettes:
weighing not over 3 lbs. per M .. 3.50
weighing over 3 lbs. per M 8.40
Tobacco and snuff (per pound)18
Cigarette paper:
package, book, or set of more than 25 and less than 50, per package005
package, book, or set of more than 50, not more than 100, per package01
package, book, or set of more than 100 papers, per 50 papers005
in tubes, per 50 tubes or fraction01
Liquor taxes are as follows:
Distilled spirits, per proof gallon ... \$9.00
Imported perfumes containing distilled spirits 9.00
Rectified spirits, additional tax on each proof gallon30
Still wines:
up to 14% alcohol per gallon15
over 14% up to 21% per gallon60
over 21% up to 24% per gallon ... 2.00
over 24% alcohol 9.00
Artificially carbonated wine, per half-pint10
Liqueurs, cordials and similar compounds, per half-pint10
Champagne and sparkling wine, per half-pint15
Fermented liquors, per barrel 8.00
Transportation taxes are levied on fares over 35 cents at the rate of 15 percent.

Individual and Corporate State Income Taxes

Individual (by % of income)			Corporate (by % of income)			Individual (by % of income)			Corporate (by % of income)		
ALABAMA						ARIZONA—(cont.)					
First	\$1,000	1½		3		Next	1,000	3½	Over	6,000	5
Next	2,000	3				"	1,000	4			
"	2,000	4½				Over	9,000	4½			
Over	5,000	5									
ARIZONA						ARKANSAS					
First	\$2,000	1	First	\$1,000	1	First	\$3,000	1	Same as for indi-		
Next	1,000	1¼	Next	1,000	2	Next	3,000	2	viduals		
"	1,000	1½	"	1,000	2½	"	5,000	3			
"	1,000	2	"	1,000	3	"	14,000	4			
"	1,000	2½	"	1,000	3½	Over	25,000	5			
"	1,000	3	"	1,000	4½						

Individual
(by % of income)Corporate
(by % of income)**CALIFORNIA**

First	\$10,000	1	4 (Tax reduced by
Next	5,000	2	15%)
"	5,000	3	
"	5,000	4	
"	5,000	5	
Over	30,000	6	

COLORADO

First	\$1,000	1	5
Next	1,000	1½	
"	1,000	2	
"	1,000	2½	
"	1,000	3	
"	1,000	4	
"	1,000	5	
"	1,000	6	
"	1,000	7	
"	1,000	8	
"	1,000	9	
Over	11,000	10	

(Temporary tax—effective from May 1, 1947 to December 31, 1948. Permanent rates apply to income prior to May 1, 1947)

CONNECTICUT

None	3% (or an alternative tax based on capital, or \$15, whichever is greater)
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DELAWARE

First	\$3,000	1	None
Next	7,000	2	
Over	10,000	3	

DISTRICT OF COLUMBIA

First	\$5,000	1	5
Next	5,000	1½	
"	5,000	2	
"	5,000	2½	
Over	20,000	3	

GEORGIA

First	\$1,000	1	5½% (or an alternative tax based on
Next	2,000	2	income plus com-
"	2,000	3	pensation, which-
"	2,000	4	ever is greater)
"	3,000	5	
"	10,000	6	
Over	20,000	7	

IDAHO

First	\$1,000	1½	Same as for indi-
Next	1,000	3	viduals
"	1,000	4	
"	1,000	5	
"	1,000	6	
Over	5,000	8	

INDIANA

Generally 1% with some lower rates (down to ¼ of 1%) applicable to income from certain sources. Applies to gross income.

Individual
(by % of income)Corporate
(by % of income)**IOWA**

First	\$1,000	1	2
Next	1,000	2	
"	1,000	3	
"	1,000	4	
Over	4,000	5	

(25% reduction on the tax was granted for tax due calendar years 1947 and 1948)

KANSAS

First	\$2,000	1	2
Next	1,000	2	
"	2,000	2½	
"	2,000	3	
Over	7,000	4	

KENTUCKY

First	\$3,000	2	4
Next	1,000	3	
"	1,000	4	
Over	5,000	5	

LOUISIANA

First	\$10,000	2	4
Next	40,000	4	
Over	50,000	6	

MARYLAND

5% on investment income, 2½% on other taxable net income.	4
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MASSACHUSETTS

1½% to 6% depending on nature of income. Total tax is increased by temporary surtax of 13% of normal tax.	5½% of net income plus .5% of corporate "excess". Total tax is increased by temporary surtax of 13% of normal tax.
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MINNESOTA

First	\$1,000	1	6
Next	1,000	2	
"	1,000	3	
"	1,000	4	
"	1,000	5	
"	2,000	6	
"	2,000	7	
"	3,500	8	
"	7,500	9	
Over	20,000	10	

MISSISSIPPI

First	\$4,000	1	Same as for indi-
Next	3,000	2	viduals
"	3,000	3	
"	5,000	4	
"	10,000	5	
Over	25,000	6	

MISSOURI

First	\$1,000	1	2
Next	1,000	1½	
"	1,000	2	
"	2,000	2½	
"	2,000	3	
"	2,000	3½	
Over	9,000	4	

Individual (by % of income)	MONTANA		Corporate (by % of income)	3	Individual (by % of income)	OREGON		Corporate (by % of income)	8
First \$2,000	1				First \$ 500	2			
Next 2,000	2				Next 500	3			
" 2,000	3				" 1,000	4			
" 2,000	3				" 1,000	5			
Over 6,000	4				" 1,000	6			
					" 4,000	7			
					Over 8,000	8			
NEW HAMPSHIRE				None	PENNSYLVANIA				4
Tax on income from intangible property at average rate of taxation levied upon other property.					None				
NEW MEXICO				2	RHODE ISLAND				4% (3% after 1948) (or alternative tax based on corporate "excess", whichever is greater)
First \$10,000	1				None				
Next 10,000	2				SOUTH CAROLINA				4½ % (or an alternative tax based on income plus salary, whichever is greater)
" 80,000	3				First \$2,000	2			
Over 100,000	4				Next 2,000	3			
					" 2,000	4			
NEW YORK				4½ % or an alternative tax based [1] on income plus salary, or [2] on capital, or \$25, whichever is greater; plus a tax on allocated subsidiary capital.	Over 6,000	5			
First \$1,000	2				TENNESSEE				3.75
Next 2,000	3				6% on dividends and interest. 4% on dividends from corporations having 75% of their property in Tennessee.				
" 2,000	4				UTAH				3% (or alternative tax based on tangible property in Utah, or \$10, whichever greater)
" 2,000	5				First \$1,000	1			
" 2,000	6				Next 1,000	2			
Over 9,000	7				" 1,000	3			
(Capital gains taxed at one-half above rates)					" 1,000	4			
Tax on unincorporated business 4%.					Over 4,000	5			
Note: For the past six years legislative action has cut the actual tax load without changing the basic rates. Thus, for 1947, individuals reduced their taxes by 40% and the tax on unincorporated business was cut to 3%. Any reduction for 1948 would require further legislative action.					VERMONT				4
NORTH CAROLINA				6	First \$1,000	1			
First \$2,000	3				Next 2,000	2			
Next 2,000	4				" 2,000	3			
" 2,000	5				Over 5,000	4			
" 4,000	6				VIRGINIA				5
Over 10,000	7				First \$3,000	2			
					Next 2,000	3			
					Over 5,000	5			
NORTH DAKOTA					WISCONSIN				
First \$2,000	1	First \$3,000	3		First \$1,000	1	First \$1,000	2	
Next 2,000	2	Next 5,000	4		Next 1,000	1½	Next 1,000	2½	
" 1,000	3	" 7,000	5		" 1,000	1½	" 1,000	3	
" 1,000	5	Over 15,000	6		" 1,000	2	" 1,000	3½	
" 2,000	7½				" 1,000	2½	" 1,000	4	
" 2,000	10				" 1,000	3	" 1,000	5	
" 5,000	12½				" 1,000	3½	Over 6,000	6	
Over 15,000	15				" 1,000	4			
OKLAHOMA				4	" 1,000	4½			
First \$1,500	1				" 1,000	5			
Next 1,500	2				" 1,000	5½			
" 1,500	3				" 1,000	6			
" 1,500	4				Over 12,000	7			
" 1,500	5				Surtax computed by deducting \$37.50 from normal tax and dividing remainder by 6.				
Over 7,500	6				Surtax computed by deducting \$75 from normal tax and dividing by 6.				

Social Security

The Social Security Act, enacted August 14, 1935 and considerably broadened by amendments in 1939, established ten separate programs. Two programs are insurance systems involving pay-roll taxes: a federal system of old-age and survivors' insurance, and a federal-state system of unemployment insurance. The other eight programs involve federal grants-in-aid to the states for the needy aged, the needy blind, dependent children, maternal and child-health services, crippled-children services, child-welfare services, vocational rehabilitation, and public-health services.

The administration of the Act is the responsibility of the Federal Security Administrator. Within the Federal Security Agency, the Social Security Administration, headed by Commissioner for Social Security, administers most of the programs.

Until July 16, 1946, activities of the present Social Security Administration were carried out by the now-abolished Social Security Board, and the children's services were administered by the Children's Bureau as part of the Labor Department.

Old-Age and Survivors' Insurance

The old-age and survivors' insurance program began in 1937, although only old-age lump-sum benefits were paid before 1940. It is the only wholly federal program.

Benefits

Benefits available to workers who are "fully insured" under the system are:

1. A monthly retirement benefit for a worker 65 or over.
2. A supplemental monthly benefit for a retired worker's wife, if she is 65 or over, and for his children, if under 18.
3. Monthly benefits to the following survivors of a deceased worker, regardless of his age at his death:
 - (a) Widow, if 65 or over.
 - (b) Widow at any age if she has dependent children in her care.
 - (c) Children, unmarried and under 18.
 - (d) Parents, if 65 or over and dependent on the deceased, but only if the worker dies leaving no widow or child entitled to benefits.
4. A lump-sum benefit, which is paid only if a worker dies leaving no widow, child, or parent entitled to monthly benefits at the time of the death. It is paid to the widow or widower, if he or she was living with the deceased at the time of death. If there is no such person, the persons paying the worker's burial expenses may be reimbursed for expenses paid. Lump-sum benefits can be paid under the above circumstances even if the worker was

drawing old-age benefits before his death and his wife or child were also receiving benefits on his wages. Furthermore, the lump sum is not in place of monthly benefits payable later to survivors and does not affect their rights to monthly benefits.

Workers who are not "fully" insured but are merely "currently" insured are entitled only to those benefits for survivors listed under 3 (b), 3 (c), and 4 above.

A worker is "fully" insured if he has been paid \$50 in taxable employment in each of 40 quarters, or if he has worked in taxable employment half the time after 1936 (or after becoming 21, if later) and before he reaches 65 or dies. (See Table 1A.)

A worker is "currently" insured if he has received wages of at least \$50 in taxable employment in at least 6 of the 13 calendar quarters preceding and including the quarter in which he died.

The amount of the worker's primary benefit—that paid to the worker when he reaches 65—is determined as follows:

(1.) Figure the worker's "average monthly wage" by dividing his total taxable wages by three times the quarters elapsed since January 1, 1937. (Since time elapsed is a factor, a person who has worked continuously in covered employment will receive a larger benefit than one who has worked in exempt employment part of the time or has been unemployed.)

(2.) Take 40% of the first \$50 of the average monthly wage and add to it 10% of the remainder (not exceeding \$200, however). Then add to this sum 1% for each year in which the worker received at least \$200 in covered employment. If the resulting sum is less than \$10, it is increased to \$10.

Example: A worker filing a claim in January 1946 was paid \$150 a month in covered employment for years 1937-40 and 1944-45. In years 1941-43 he worked on a farm in exempt employment. (1) His wages for the years 1937-40 and 1944-45 total \$10,800. This is divided by the number of months since 1937: 108. His average monthly wage is \$100. (2) To find his benefit amount take \$20 (40% of the first \$50 of his monthly wage) and add to it \$5 (10% of the remaining \$50) and to this total (\$25) add \$1.50 (1% of \$25, multiplied by 6). The benefit amount is \$26.50 per month.

Starting January, 1947, a benefit claim is considered filed as of the quarter which will yield the highest benefit. Also, it may be recomputed later to include subsequent earnings.

The amounts of other benefits are derived from the primary benefit as follows:

Wife: one-half of primary benefit.

TABLE NO. 1
Examples of Retirement and Survivor's Benefits

Worker's average monthly pay	Monthly retirement		Monthly survivors			Lump-sum death payments
	Worker	Worker and wife	Widow	Widow and one child	One child or one parent	
3 years' coverage:						
\$50.....	\$20.60	\$30.90	\$15.45	\$25.75	\$10.30	\$123.60
100.....	25.75	38.63	19.31	32.19	12.88	154.50
150.....	30.90	46.35	23.18	38.63	15.45	185.40
250.....	41.20	61.80	30.90	51.50	20.60	247.20
5 years' coverage:						
\$50.....	\$21.00	\$31.50	\$15.75	\$26.25	\$10.50	\$126.00
100.....	26.25	39.38	19.69	32.82	13.13	157.50
150.....	31.50	47.25	23.63	39.38	15.75	189.00
250.....	42.00	63.00	31.50	52.50	21.00	252.00
10 years' coverage:						
\$50.....	\$22.00	\$33.00	\$16.50	\$27.50	\$11.00	\$132.00
100.....	27.50	41.25	20.63	34.38	13.75	165.00
150.....	33.00	49.50	24.75	41.25	16.50	198.00
250.....	44.00	66.00	33.00	55.00	22.00	264.00
20 years' coverage:						
\$50.....	\$24.00	\$36.00	\$18.00	\$30.00	\$12.00	\$144.00
100.....	30.00	45.00	22.50	37.50	15.00	180.00
150.....	36.00	54.00	27.00	45.00	18.00	216.00
250.....	48.00	72.00	36.00	60.00	24.00	288.00
30 years' coverage:						
\$50.....	\$26.00	\$39.00	\$19.50	\$32.50	\$13.00	\$156.00
100.....	32.50	48.75	24.38	40.63	16.25	195.00
150.....	39.00	58.50	29.25	48.75	19.50	234.00
250.....	52.00	78.00	39.00	65.00	26.00	312.00
40 years' coverage:						
\$50.....	\$28.00	\$40.00	\$21.00	\$35.00	\$14.00	\$168.00
100.....	35.00	52.50	26.25	43.75	17.50	210.00
150.....	42.00	63.00	31.50	52.50	21.00	252.00
250.....	56.00	84.00	42.00	70.00	28.00	336.00

TABLE NO. 1A
Quarters of Coverage Required for Individuals Attaining Age 65 to Be Fully Insured

Quarter in which 65 ¹	Quarters elapsed after 1936 ²	Quarters of coverage required to be fully insured	Quarter in which 65 ¹	Quarters elapsed after 1936 ²	Quarters of coverage required to be fully insured
1948-1st quarter	44	22	1953-1st quarter	64	32
2	45	22	2	65	32
3	46	23	3	66	33
4	47	23	4	67	33
1949-1	48	24	1954-1	68	34
2	49	24	2	69	34
3	50	25	3	70	35
4	51	25	4	71	35
1950-1	52	26	1955-1	72	36
2	53	26	2	73	36
3	54	27	3	74	37
4	55	27	4	75	37
1951-1	56	28	1956-1	76	38
2	57	28	2	77	38
3	58	29	3	78	39
4	59	29	4	79	39
1952-1	60	30	1957-1	80	40
2	61	30	2	81	40
3	62	31	3	82	40
4	63	31	4	83	40

¹All individuals attaining age 65 subsequent to January 1, 1957 will be required to have not less than 40 quarters of coverage.

²Not including quarter in which individual became 65 or died.

Child: one-half of primary benefit.

Widow: three-quarters of primary benefit.

Parent: one-half of primary benefit.

Lump-sum benefit: 6 times the primary benefit. (If paid to persons paying burial expenses, the benefit is limited to expenses incurred.)

Maximum total of benefits which may be paid on any one worker's wages is the least of the following: \$85; 80% of the worker's average monthly wage; or twice the primary benefit. If benefits are already \$20 or less, they will not be further reduced.

A person earning \$15 or more in a month in covered employment is not eligible for a benefit for that month. Benefits to a wife or child are also canceled during any month in which insured worker earns \$15.

Application for benefits is made to the nearest field office of the Social Security Administration.

Rates and Coverage

All employers covered by the federal insurance contributions law are required to pay a 1% tax on wages paid to employees, and each employee also pays a 1% tax on his pay. Tax rates are scheduled to rise to 1½% in 1950 and to 2% in 1952. Previously scheduled increases ranging from rates of 1½% to 2½% have been voted down by Congress for 9 successive years, the rate remaining frozen at 1%.

Neither employer nor employee is required to pay tax on that part of a worker's pay which is over \$3,000 in any calendar year. If an employee does so because he worked for more than one employer, he may apply for a refund of excess tax at the end of the year.

The employee's tax is deducted by the employer and is paid over to the Internal Revenue Bureau at the end of each quarter together with the employer's tax. Although these taxes are initially paid into the Treasury, a corresponding amount is appropriated yearly from the Treasury into the Old-Age and Survivors Insurance Trust Fund, from which benefits are paid.

An employer is liable for payment and deduction of tax as soon as he employs one employee. The length of employment and the number of employees is immaterial.

The following workers are exempt, and no tax is incurred on their wages: self-employed; agricultural labor; domestic service; casual labor not in the course of the employer's business; persons working for a son, daughter or spouse, or for a parent if the child is under 21; government employees (including United Nations, etc.); employees of nonprofit religious, charitable or educational organizations; railroad workers; certain employees of or-

ganizations exempt from income tax; student nurses and interns; workers on small fishing vessels; newsboys under 18; certain newspaper and magazine vendors.

A worker is either completely exempt or completely covered by the law, depending on which type of work occupies more than half of the pay period. If work is equally divided, all his work is covered.

Veterans of World War II, who would not otherwise have received wage credits for their time in the service, were in 1946 voted special coverage in the event of death within 3 years after discharge. In such cases they are considered to have died fully insured, to have an average monthly wage of at least \$160, and to have had \$200 annual wages for each year of at least 30 days' active service.

Board Wage Records

Every employee must have a social security number. An account with the Social Security Administration is set up for each worker, and to this account are credited all wage payments reported. When a benefit claim is filed, these accounts are used to determine if the claimant is eligible for benefits and, if he is, the amount of the benefit to be paid.

By June, 1948, the Administration had 88,000,000 social security accounts.

Unemployment Compensation

Federal and state governments cooperate in the administration of the unemployment insurance program. The federal law, beginning with 1936, imposed an excise tax on employment and established the framework for the federal-state system. All states (including District of Columbia, Hawaii and Alaska) followed suit, most of them in 1936 and 1937. Benefits became payable in most states in 1938 and 1939. (Wisconsin was the only state to pass such a law earlier—taxes were first collected in July, 1934.)

Benefits

The state laws determine who shall receive unemployment benefits, in what amount, and under what conditions. The provisions vary in each state, but generally a person is entitled to benefits for any week during which he is totally or partly unemployed, provided he has earned a sufficient amount of wages from an employer subject to the state law, has filed a claim for benefits, has served a "waiting period" of one week or so, and is not disqualified.

Disqualification means that the payment of benefits is postponed for a certain number of weeks, or is suspended entirely, because the worker is in one of the following situations:

1. Not able to work—ill, aged or disabled to the point that he cannot perform any marketable services.

2. Not available for work—not willing to do work for which he is fitted by experience, education or training, or places unreasonable restrictions on hours, wages, shift or skill he will accept, with the result that he is not likely to find the job he wants. Many states also require him to be actually searching for a job.

3. Quit work—left his job voluntarily without good cause. "Good cause" is some sound reason which would impel an ordinarily prudent person to quit, such as an unreasonable increase of hours without a pay increase, a substantial reduction in wages, requirement of excessive unpaid overtime, a transfer to work which injures the person's health, an unreasonably heavy work quota, unjustified reprimands or abuse from superior, etc.

4. Discharged for misconduct—discharged because of conduct detrimental to his employer's interests—for example, refusal to obey orders, absence from work, tardiness, violation of employer's rules, intoxication at work, etc.

5. Refused job offer of suitable work without good cause—refused a job which is reasonably fitted to his training, experience, or skills, pays the prevailing wages for similar work, is not detrimental to his health or safety, has working conditions which are not substantially less favorable than those prevailing in similar work in the locality, and is within a reasonable distance from his home. If the job offer is suitable, the person is expected to accept it unless he has good cause for refusing, such as reasonably good prospects of employment elsewhere, unreasonable conditions required by employer, etc.

6. Involved in labor dispute. Even if the worker is not striking, he may be disqualified if he is a member of the union involved; or his wages, hours or working conditions will be affected by the outcome of the strike; or he serves on or refuses to cross picket lines; or engages in a sympathy strike. In almost all states benefits cannot be paid as long as the dispute persists. Only states where strikers can receive benefits are: New York—after 7 weeks; Rhode Island—after 8 weeks.

Some state laws also disqualify workers who leave because of marriage, marital duties, pregnancy, to attend school, or who receive dismissal pay, vacation pay, workmen's compensation payments, or veterans' readjustment allowances.

A worker seeking unemployment benefits must file a claim at the local office of the state unemployment bureau and register for work with the employment service. At that time, a benefit year (usually the year running from the date of his claim) and a base period (usually the year ending from 3 to 6 months before the

TABLE NO. 2
Old Age and Survivors' Insurance:
Summary of Operations
(in millions of dollars)

Year	Wage taxes collected	Interest received	Trust fund at end of year	Benefits paid*
1937.....	\$ 493	\$ 2.3	\$ 766	\$ 1.3
1938.....	474	15.4	1,132	10.5
1939.....	568	27.0	1,724	13.9
1940.....	637	42.9	2,031	40.6
1941.....	789	56.2	2,762	93.9
1942.....	1,012	72.3	3,688	137.0
1943.....	1,239	88.3	4,820	172.9
1944.....	1,316	106.7	6,005	218.0
1945.....	1,285	134.3	7,121	273.9
1946.....	1,295	151.6	8,159	378.1
1947.....	1,558	164.2	9,360	466.2

*Only lump-sum payments were made until 1940.

filing of his claim) are established for him. His benefit amount will be a percentage of the wages earned in his base period, but no more than the maximum amount allowed. He is entitled to draw benefits for the set number of weeks during the rest of that benefit year. When he has exhausted these benefits he will not be eligible again until he can establish a new benefit year for which he has the necessary base period wages.

An employee moving out of the state does not lose benefit rights earned under that state law. He merely files a claim for benefits at the local office in the state where he is now located and this office will act as agent for the other state in paying him benefits.

Tax

An employer is generally liable for a maximum total tax of 3% of his pay roll—0.3% to the federal government and 2.7%, or less, to the state. Although the federal government itself technically levies a payroll tax of 3%, in practice this usually amounts to only 0.3% because the employer is allowed a credit of as much as 2.7% for taxes paid to the states. The federal tax goes into general revenues, from which funds are appropriated each year to the states to cover administrative costs. Taxes collected by the states are used solely for benefit payments.

Under the federal law, which is merely a taxing statute, the Treasury Department collects the tax, which is paid annually. The state laws, under which benefits are paid, are administered by the various state unemployment insurance agencies.

Only two states require contributions from employees in addition to those from employers: Ala.—the rate varies from 0.1% to 1.0% depending on the rate of the employer; N. J.— $\frac{1}{4}$ %.

TABLE NO. 3
State Unemployment Compensation Maximums
 (corrected to Aug. 1, 1948)

State	Weekly benefit	Duration (in weeks)	State	Weekly benefit	Duration (in weeks)
Alabama	\$20	20	Montana	\$18	16
Alaska	25	25	Nebraska	18	18
Arizona	20	12	Nevada	26	20
Arkansas	20	16	New Hampshire	22	23
California	25	26	New Jersey	22	26
Colorado	17.50	20	New Mexico	20	20
Connecticut	36	22	New York	26	26
Delaware	18	22	North Carolina	20	16
D. C.	20	20	North Dakota	20	20
Florida	15	16	Ohio	21	22
Georgia	18	16	Oklahoma	18	20
Hawaii	25	20	Oregon	20	20
Idaho	20	20	Pennsylvania	20	24
Illinois	20	26	Rhode Island	25	26
Indiana	20	20	South Carolina	20	18
Iowa	20	20	South Dakota	20	20
Kansas	18	20	Tennessee	18	20
Kentucky	20	22	Texas	18	18
Louisiana	25	20	Utah	25	25
Maine	22.50	20	Vermont	20	20
Maryland	25	26	Virginia	20	16
Massachusetts	25	23	Washington	25	26
Michigan	28	20	West Virginia	20	21
Minnesota	20	20	Wisconsin	24	31
Mississippi	20	16	Wyoming	20	20
Missouri	20	20			

Merit Rating

All states collect unemployment taxes under "merit rating" systems. These systems allow tax rates lower than the usual standard rate of 2.7% to those employers who have some success in stabilizing employment, provided they have paid the tax for 3 or 4 years. In most states low rates go to employers who have fewest ex-employees drawing unemployment benefits; in others, those employers benefit who have little or no decrease in pay roll.

The average tax rate in merit rating states in 1947 was 1.4%. During the years 1942-47, employers were saved over 2 billion dollars because of merit rating.

Coverage

Employers are liable for the federal tax if they have eight or more employees on some day of each of 20 weeks in a year.

State requirements for liability vary, ranging from eight employees in the state down to a single employee. An employer who has employees in several states may be subject to as many state laws.

Liability for both federal and state taxes is limited to the first \$3,000 of a worker's pay in a year.

Certain employees are exempt from tax under federal and most state laws and are not counted in determining whether an

employer is subject to tax. These are self-employed, agricultural workers, domestic workers, members of a proprietor's immediate family, railroad workers, government employees, employees of nonprofit educational, charitable or religious organizations, insurance agents, newsboys under 18, student nurses and interns, and casual labor not in the course of an employer's business. Although maritime workers had previously been exempt under the federal law and in some states, the federal law was amended to include them as of July 1, 1946, and coverage is being similarly extended in a growing number of states.

TABLE NO. 4
Total Unemployment Compensation Benefits Under State Laws

Source: Social Security Administration.

Year	Total benefits (in thousands)	Average number of beneficiaries per week
1940	\$518,700.4	982,392
1941	344,320.7	621,065
1942	344,084.1	541,495
1943	79,643.1	115,454
1944	62,384.6	79,306
1945	445,865.8	466,550
1946	1,095,475.2	1,150,217
1947	775,000.0	852,392

Public Assistance

Under the Social Security Act, federal grants are made to the states for public assistance to needy persons, provided the state plan for distribution of the aid has been approved by the federal government. All states and territories cooperate in old-age assistance plans: all but Alaska cooperate in plans for the needy blind; all but Nevada share in plans for needy children; all states and Puerto Rico have approved plans for maternal and child-health services, services for crippled children, and child-welfare services. Beginning January, 1947, grants for maternal and child-health services may be made to the Virgin Islands.

The federal contribution to the states, until October 1, 1946, was usually one-half of the monthly payment, up to the maximum fixed by federal law. They were first increased starting October 1946 and again starting October 1, 1948. Federal contributions for assistance to the needy aged and blind now are: \$15 of the first \$20 and 50% of any amount between \$20 and \$50. Federal contributions for dependent children are: \$9 of the first \$12 and 50% of the balance. The maximum payment to which the federal government will contribute for needy children is: for one child, \$30; for one child where more than one in the same home, \$27; for each other child in the same home, \$18. Only those children are eligible who are under 16 (or under 18 and still at school) and who have been deprived of parental support or care and are living with a member of the family.

In June 1947, 3,300,000 persons were re-

ceiving assistance under the Social Security Act. Average monthly payment in June of 1947 to the needy aged was \$36.04; to needy children, \$24.21, and to the needy blind, \$37.87.

Social Security for Railroad Workers

Social security for most workers in the railroad transportation industry is provided under a national system apart from that established by the Social Security Act. The Railroad Retirement Act was first passed in 1934, but was held unconstitutional by the Supreme Court. The present Act was passed in 1935 and was substantially amended in 1937 and again in 1946. It is administered by the Railroad Retirement Board.

Taxes supporting the system are collected under the Carriers Taxing Act by the Bureau of Internal Revenue. Taxes are levied on the first \$300 of monthly compensation, on both employers and employees at these rates: 1937-39: 2 3/4 %; 1940-42: 3 %; 1943-45: 3 1/4 %; 1946: 3 1/2 %; 1947-48: 5 1/4 %; 1949-51: 6 %; 1952 on: 6 1/4 %.

Benefits provided are: retirement benefits at 65 or over, and, under certain circumstances, 60; survivors' benefits; disability benefits.

Under the Railroad Insurance Act, also administered by the Railroad Retirement Board, railroad workers receive unemployment insurance, and after July 1, 1947, sickness compensation and maternity benefits. Costs are paid by employers at a rate of 1/2 % of pay roll up to \$300 a month per worker. Rates may increase in 1/2 % gradations to a maximum of 3% according to a scale of rates set by the size of the benefit fund. Taxes are collected by the Board.

TABLE NO. 5
Public Assistance Payments
(in thousands of dollars)
Source: Social Security Administration.

	Total	Special types of assistance payments			
		Old-age assistance	Aid to dependent children	Aid to the blind	General assistance
1933.....	\$1,223,779	\$26,071	\$40,504	\$5,839	\$758,752
1934.....	2,380,865	32,244	40,686	7,073	1,200,360
1935.....	2,532,467	64,966	41,727	7,970	1,433,180
1936.....	3,119,013	155,241	49,462	12,813	439,004
1937.....	2,653,918	310,441	71,253	16,171	406,881
1938.....	3,236,600	392,386	97,447	19,154	476,201
1939.....	3,185,447	430,666	114,954	20,437	481,723
1940.....	2,723,408	472,791	132,925	22,703	394,398
1941.....	2,227,527	540,446	153,028	22,785	273,007
1942.....	1,546,241	601,400	158,032	24,495	180,471
1943.....	930,234	653,171	140,942	25,143	110,978
1944.....	942,457	693,338	135,015	25,342	88,762
1945.....	989,686	726,550	149,667	26,557	86,912
1946.....	1,182,587	822,061	208,857	30,748	120,920
1947.....	1,480,774	986,470	294,038	36,198	164,068

Federal Civil Service

The civil-service retirement system, first established in 1920, now provides a retirement system for almost all federal employees not under another plan. It provides for a retirement benefit at 70, or at 62 or 60 or 55, depending on the number of years' service; a disability retirement benefit; a deferred annuity for separated employees with 5 years' or more service when they reach the age of 55 or 62; refunds if service is less than 5 years; death benefit to a wife or dependent child in the amount of the worker's credit in the fund.

In order to finance increased benefit amounts, employees' contributions were raised from 5% to 6%, starting July 1, 1948. The Government's share in the cost of the program also rose from 5% to 6½%.

Health Insurance

With the exception of state laws for sickness compensation in Rhode Island, California and New Jersey, health insurance is on a voluntary basis. An increasing number of companies have set up plans for their employees, either on their own or by signing up with an insurance company or nonprofit organization. Many unions have plans for their members, as do other private groups.

Popular fields for insurance are hospitalization costs, accident insurance, medical and surgical care, and pay for time lost through sickness.

The largest of the nonprofit plans is the Blue Cross, whose 87 hospital-service plans have over 29,000,000 subscribers throughout the country.

Veterans' Benefits

Mustering-out pay

Veterans—except, in general, those ranking higher than Army captain or Navy lieutenant honorably let out after Pearl Harbor and whose enlistment began before July 1, 1947—get mustering-out pay as follows:

- \$100 for those who served less than 60 days.
- \$200 for those who served 60 days or more in continental United States.
- \$300 for those who served 60 days or more outside continental United States or in Alaska.

If a discharged veteran dies before receiving payment, distribution of mustering-out pay is limited to spouse, children, or parents, in that order.

Job reinstatement

The Selective Service Act expired March 31, 1947. However, Section 8, providing for re-employment of veterans inducted under it continued in effect. Men inducted between March 31, 1947 and June 24, 1948 have job rights under the Service Extension Act of 1941. The Selective Service Act of 1948 provides re-employment rights to men entering the armed forces for terms of three years or less, after June 24, 1948. These three laws grant to honorably discharged veterans:

1. Their old job back, or one of like seniority, status and pay.
2. Guarantee against discharge except for cause for one year after reinstatement. During that time the veteran cannot be demoted nor can his job benefits be reduced.

Qualifications on job rights

The veteran must be reapplying for a job that was not temporary at the time he left it; the employer need not reinstate him if circumstances have so changed as to make rehiring impossible or unreasonable; ap-

plications must be made within 90 days of discharge. Under the 1940 and 1941 laws the veteran need not be rehired if he is no longer qualified to do his job, but under the 1948 law if he cannot do his former work he must be given a job as nearly like it as he can fill. A veteran may be laid off if work slackens.

How the veteran can enforce his rights

By suit in the U. S. District Court with the assistance of the U. S. Attorney.

National Guard, reserve officers, and retired personnel have Selective Service rights. Benefits are not limited to draftees—anyone, including WACS, WAVES, SPARS, and Marines (female), who entered active service after May 1, 1940, is covered.

Vocational rehabilitation

Vocational rehabilitation courses not exceeding 4 years and placement in suitable, gainful employment are available for any veteran who served on or after September 16, 1940, and on or before July 25, 1947, and was honorably discharged with a service-connected disability which can be overcome by training.

The Veterans Administration arranges for the training, pays for tuition and books and the veteran receives, in addition, training allowance added to his disability pension to achieve the following minimums for veterans with less than a 30% disability:

- \$105 per month, if without a dependent
- \$115 per month, if with a dependent, *plus*
- (a) \$10 for one child and \$7 for each additional child, and
- (b) \$15 for a dependent parent.

For veterans with a 30% or greater disability:

- \$115 per month, if without a dependent

\$135 per month, if with a dependent plus \$20 for one child and \$15 for each additional child.

If the veteran's disability pension exceeds the above minimum he gets the larger amount. Once employed, his basic pension will in no way be reduced because he has succeeded in overcoming his handicap.

Disability Pensions

Veterans having a 10 percent or more disability resulting from disease or injury incurred in or aggravated by war service are eligible to receive a pension if their separation from the service was not under dishonorable conditions. Pension rates vary from \$13.80 to \$138 per month, depending on the extent of disability. Pension payments are "untouchable" in legal proceedings and may not be assigned. Pension awards are within the jurisdiction of the Veterans Administration. A veteran's widow and surviving children are also eligible to receive pension benefits.

Veterans preference

Veterans who have been separated from the service under honorable conditions must be given preference in certification for appointment, in appointment, in reinstatement, in re-employment and in retention in federal civil service positions. Specifically with respect to the positions of crier or bailiff in federal courts, the Court Crier or Bailiff Preference Act grants preference in appointment to veterans.

National Service Life Insurance

Persons in service and veterans who never owned any GI insurance, but who were in service between October 8, 1940 and September 2, 1945, are entitled to take out insurance in any amount between \$1,000 and \$10,000 in multiples of \$500. The insurance is on a five-year level premium term plan, and in the first instance is granted against the death of the insured while in service. It is convertible to ordinary life, 20- or 30-payment life, 20-year endowment or endowment at the age of 60 or 65, on any premium date after one year within the five-year term.

Veterans have the right to convert the insurance without medical examination, except (a) where necessary to determine whether the insured is totally disabled and (b) upon complete surrender of the policy while it is still in force. Reconversion may also be made to higher premium rate, or, upon proof of good health to a lower premium rate.

For insurance maturing on or after August 1, 1946, beneficiaries may be any person or persons, firm, corporation or any other legal entity individually or as trustee. Where no beneficiary has been designated, or where the beneficiary has died, payments are made to widow or

widower, child or children (including adopted children), parents or brothers and sisters of the insured. Payment is made to the beneficiary in 36 monthly installments unless one of these options is elected instead: payment in one lump sum; payment in specified number (no less than 36) of monthly installments; payment in installments throughout life; refund life income. If the insured becomes disabled while in service the government assumes payment of the premiums.

Men who have entered the service after Sept. 2, 1945, including men inducted under the Selective Service Act of 1948, are also eligible for insurance if they take it out while they are in the service.

Servicemen's Readjustment Act of 1944

The "GI Bill of Rights" applies to veterans who served on or after September 16, 1940 or before July 25, 1947. It provides for hospitalization, education, loans, employment, and readjustment allowances.

Education

A veteran who has served 90 days or more since September 16, 1940 and before July 25, 1947 may avail himself of educational opportunities at government expense. He must start the course not later than 4 years after separation or 4 years after July 25, 1947, whichever is later. No training or education will be offered after July 25, 1956.

A veteran who qualifies is entitled to 12 months of education or its equivalent in part-time study plus additional time up to three years (a total of 4 years) in direct proportion to the time he spent in service. Therefore, a veteran with 32 months of service is entitled to 44 months of education or training.

The Veterans Administration will pay tuition and school fees up to a total of \$500 for each school year in attendance at an approved institution. No board, lodging, or other living or travel expenses are paid, but while at school the veteran is entitled to \$65 per month living allowance, and \$90 if he has dependents. Allowance will not be paid if the veteran is earning \$210 (if single), \$270 (if one dependent) or \$290 (if two or more dependents) in full- or part-time employment while he is attending school. Where the amount of his earnings is less than those ceilings, subsistence allowance payments will be made to bring the total up to the ceilings.

The veteran may elect any course of study if the school will accept him, and he must maintain satisfactory standing.

A veteran may also elect to take apprenticeship or on-the-job training in an industrial establishment. His earnings in training plus the government allowance cannot exceed \$210 a month if single, \$270 if married or \$290 if he has two or more dependents.

Loans to Veterans

Three types are available: 1. For purchase or construction of homes; 2. for purchase of farms and farm equipment; 3. for purchase of business and business property.

In all three types, eligibility requirements are that the veteran must have entered the armed service on or after September 16, 1940 and before July 25, 1947; he must have an honorable discharge after service of at least 90 days or a service-connected disability as reason for the discharge or release; application must be made within ten years after the end of the war.

The government will guarantee 50 percent of the loan—up to a maximum guaranty of \$2,000 on non-real-estate loans, and \$4,000 on real-estate loans, or prorated portions on loans of both types or in combination. Proposed price must not exceed reasonable value as determined by an appraiser designated by the Administrator. Maximum interest rate is 4 percent. Terms of loans: (a) on farm realty—40 years; (b) other real estate—25 years; (c) non-real estate—10 years. (Under certain circumstances second loan guarantees may be undertaken with the approval of the Administrator.)

Home Loans

Proceeds must be used for purchase of property, construction or improvement costs—the property to be occupied by the veteran as his home. Mortgage amortization terms must be in proper proportion to the veteran's present and expected income and expenses.

Business loans

Business loans will be approved when they are to be used (a) for engaging in business or pursuing a gainful occupation; (b) for purchasing land, buildings, supplies, equipment, machinery, etc., for business; (c) for constructing or repairing real or personal property to be used in business; (d) for working capital.

There must be reasonable likelihood of success, as indicated by the veteran's ability and experience and the conditions under which he intends to conduct the business.

Farm Loans

Farm loans will be made to a veteran for purchase or repair of lands, machinery, equipment, livestock, etc., for farming.

The ability and experience tests are similar to those applying to business loans. Veteran must have reasonable prospect of success in farming.

Readjustment Allowance

This section of the GI Bill provides for payment of \$20 a week for a maximum of 52 weeks to unemployed veterans residing in the United States. It also provides for

the payment to a partially-employed veteran whose weekly wages are less than \$23 of the sum of \$20 less the amount of his wages in excess of \$3. The veteran must be able to work, registered with a public employment office and must not be receiving an allowance through any other provision of the Act. A self-employed veteran earning less than \$100 per month is eligible for an allowance representing the difference between his net earnings and \$100. Allowances are available to an eligible veteran no later than 2 years after his discharge or two years after July 25, 1947, whichever is later.

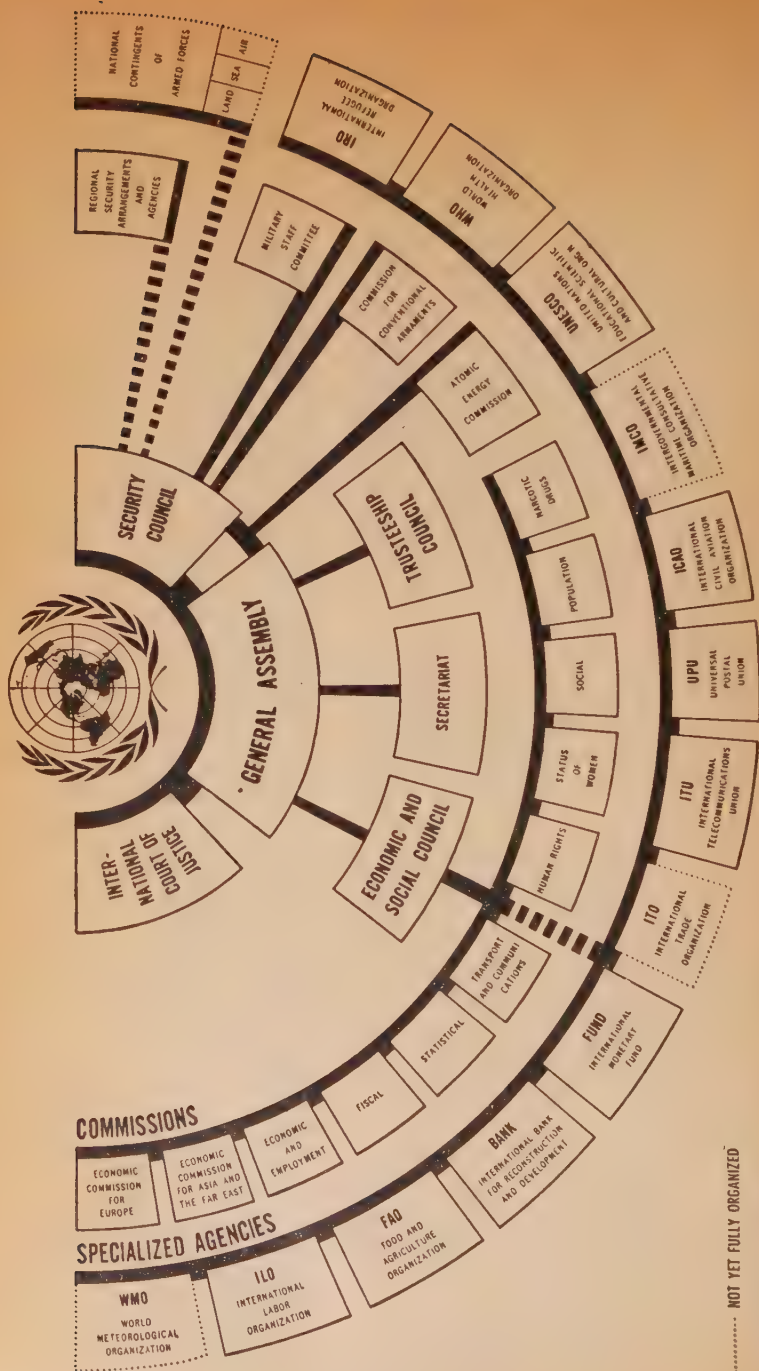
Selective Service

Under the Selective Service Act of 1948, all men 18 to 26 must register for military service and those 19 to 26 are eligible for the draft. Veterans and men who were members of an organized reserve of the armed forces on June 24, 1948 are exempt from service. Ministers and divinity students, and the sole surviving son of a family which lost one or more children in the last war are also exempt. Deferred classifications include men with dependents, government officials, men mentally, morally or physically unfit, and certain aliens. High school students will be deferred until they become 20 or graduate whichever is earlier and college students doing satisfactory work will not be inducted before the end of the academic year. Men whose activity in study, research, medical or scientific work, agriculture or industry is found necessary to the national health, safety or interest may also be deferred. The President is empowered to name specific occupations which are necessary to the national health, safety or interest when he finds it advisable. Conscientious objectors are allowed to register for noncombatant service.

Classification of men is in the hands of local draft boards. Anyone may file a request for individual deferment with the local board. Appeals of local board classifications may be taken to regional appeal boards and from them to the national appeal board.

On July 17, 1948, President Truman appointed Maj. Gen. Lewis B. Hershey as Director of Selective Service, and three days later the President issued his proclamation ordering all men required by law to register from Aug. 30 to Sept. 18, the 25-year-olds to register first. A total of 8,584,963 registered but only 2,147,813 were in class 1 A from which the Services expect to get their draftees. The Army, in the meantime, had announced, on July 14, that, effective Aug. 1, it would install a new grading system for all army men. The actual draft began in November. (For further information, see Index, under Selective Service and U. S. Army.)

ORGANIZATION OF THE UNITED NATIONS



THE UNITED NATIONS



THE PAST YEAR

by

MARCUS DUFFIELD

The U. N. was not, of course, designed to arrange the peace between the Allies and the Axis countries. The founders of the U. N. fondly believed that England, France, Russia and the U. S. would amicably attend to that; and the U. N. would keep the peace once it was made.

As things turned out, the arrangement of World War II peace treaties was the gigantic problem of the postwar years—a problem which gave rise to the “cold war” between Russia and the Western Allies. The world was worried in 1948 lest the cold war turn into a shooting one. The U. N. had to stand by more or less idly, because it was not constructed to deal with such a major world schism. If people tended to lose faith in the U. N., it was largely because they expected from it miracles which it was not designed to perform.

There was, however, a trend toward bringing the U. N. into the field of the peace settlements. The trend was fostered by the Western Allies as a matter of desperation because they could not bring Soviet Russia into what they regarded as a mood of reasonableness. They hoped to mobilize world sentiment through the U. N. as a means of influencing Russia.

The trend toward involving the U. N. in the peace treaties was manifest in the case of Korea. The Russians occupied the northern half of the country, and the Americans the southern half. The original idea was to unite the two parts and let Korea form a unified, independent government. However, the U. S. and Russia were unable to agree on arrangements for a free election in all Korea. The U. S. felt that Russia was trying to rig the proposed election by restricting the vote to people who leaned toward Communism.

The U. S. put the problem up to the U. N. General Assembly, which decided in Nov., 1947, to send a commission to Korea to make arrangements for an election. When the commission got there, Russia

would have nothing to do with it and refused to let its members even set foot across the 38th parallel into the Russian zone.

The U. N. commission asked the Little Assembly (the continuing agent of the General Assembly) whether to give up the attempt to hold Korean elections, or hold one in the American zone. The Little Assembly voted 31-2 on Feb. 26 to authorize an election in the American zone under U. N. supervision. The election was held on May 10 and was won by Dr. Syngman Rhee's Independent party (anti-Communist). A constitution was completed in July, and preparations were under way to set up an independent government in the southern half of the country.

Meanwhile, Russia had established in its northern zone a puppet government called the “Democratic People's Republic of Korea,” which claimed power over the whole country. American authorities estimated its army at 200,000 troops, equipped with Russian weapons. The U. S. was loath to withdraw occupation troops from southern Korea, lest the Communist-dominated army march down from the north and gain control of the entire nation.

ITALIAN COLONIES

The second instance in which the U. N. was drawn into the peacemaking came on Sept. 15, 1948, when the fate of Italy's former African colonies—Libya, Eritrea and Somaliland—was put up to the General Assembly. This came about because the Big Four had been unable to reach agreement, after three years of argument, as to what disposition should be made of the colonies that Italy was required to give up in the peace treaty ratified on Sept. 15, 1947. In the peace treaty, the Big Four inserted a provision that if they could not agree after another year, the issue would be settled by the Assembly.

During the discussion of the colonies,

the Big Four had shifted position frequently. When they gave up trying to settle the question, they were in harmony on only one point: that Somaliland, least valuable of the three colonies, should be returned to Italy under U.N. trusteeship. On the subject of the other colonies, the nations differed along these lines:

Russia suggested that Eritrea and Libya be administered by the U.N. Trusteeship Council.

England and the U. S. suggested that the eastern half of Libya (known as Cyrenaica) be administered by England under U.N. trusteeship, and that no action be taken on the rest of Libya or Eritrea for another year. (Strategic considerations may have entered in, since Cyrenaica has in Tobruk a deep-water harbor suitable for warships, as well as plenty of flat land suitable for air bases, from which bombers could visit all southern Europe and the Middle East.)

France favored having Italy administer all three colonies under U.N. trusteeship.

THE BERLIN CASE

In late September, the U.N. was plunged more deeply than ever into the postwar peace problems and the "cold war" between Russia and the Western Allies. The U. S., England and France accused Russia of actions at Berlin that constituted a "threat to international peace and security," and asked the Security Council to deal with the matter.

At the close of the war the Big Four had agreed that they would occupy Berlin jointly, with the city divided into four sectors, one each to be garrisoned by troops of Russia, the U. S., England and France. In 1948, it became obvious that Russia wanted to force out of Berlin the occupation troops of the three Western Allies and bring the former German capital under exclusive Soviet control. The city was entirely surrounded by the Russia occupation zone, which extended about 100 miles to the west before meeting the borders of the Anglo-American occupation zone in western Germany.

In April, the Russians began to put difficulties in the way of Anglo-American shipment of supplies from their western zones into Berlin. Such supplies were essential not only to provision the Allied occupation troops in their sectors of the city, but also to provide food, coal and other goods to some 2,000,000 Germans who lived in the American, British and French sectors of Berlin.

On June 19, 1948, the Russians forbade all shipments from western Germany into the Western Allies' sectors of Berlin, by rail, by truck and by barge. The Allied occupation troops and the German popula-

tion would have been left to starve, except for a mighty procession of planes which the American and British military authorities flew into Berlin, bearing food and coal. This airlift reached such proportions that planes were landing every three minutes, day and night, carrying an average of 4,400 tons a day in September.

Russia's next step was to insist that only the Soviet-issued mark be used as legal currency in the entire city of Berlin—barring the mark issued by the Western Allies in their sectors. The Allies were willing to grant this demand provided (a) the issuance of the Soviet mark was placed under four-power control; and (b) the Russians lifted the land blockade of Berlin.

From July 31 to Sept. 14 American, British and French envoys in Moscow had a series of confidential talks with Russian Foreign Minister Molotov and sometimes with Prime Minister Stalin, too, about the Berlin situation. Late in August, Stalin agreed to lift the blockade and institute four-power control of the Soviet mark throughout Berlin. The negotiations then shifted to Berlin for technical arrangements to be drawn up. However, the Russian Military Governor, Sokolovsky, failed to carry out the promise which Stalin had made. Talks broke down. The Western Allies sent Russia a final note on Sept. 22, asking a clear-cut reply as to whether the Soviet Union was prepared to make good on Stalin's promise. Four days later came the Russian reply, refusing to implement the bargain, and, in addition, demanding Soviet control over all air shipments into Berlin.

At that point, the U. S., England and France broke off negotiations about Berlin on the grounds that nothing could be achieved. They referred the whole problem to the U. N. Security Council. Over Russia's protest, the Council placed the Berlin crisis on its agenda.

THE PALESTINE CASE

The Security Council took stern action under Chapter VII of the Charter to stop the fighting in Palestine between Jews and Arabs. Chapter VII authorizes the use of economic and military sanctions against an aggressor who breaches the peace.

The General Assembly had decided in November, 1947, that Palestine should be partitioned into two nations—one Arab and one Jewish—with Jerusalem under U. N. control. A five-man commission was appointed to supervise the partition. In February, the commission reported that the task was utterly impossible unless an international army were created to make partition stick. Lacking a U. N. armed force (which had been contemplated in the Charter, but never organized), the Se-

Security Council failed to agree on a course of action.

At the request of the U. S., a special meeting of the General Assembly was convened on April 16 to deal with the Palestine problem. By this time the U. S. had switched over from advocacy of partition to advocacy of a U. N. trusteeship over the troubled Holy Land. The Assembly was no more successful than the Council in charting a course of action. It did not support the trusteeship idea, and allowed the original partition plan to stand.

On midnight, May 14, Great Britain gave up its mandate over Palestine and ceased to govern. The Jews proclaimed the new state of Israel, which was recognized by the U. S. and Russia and many others. Arab troops from near-by states—Trans-Jordan, Egypt, Iraq, Syria, Lebanon—invaded Palestine with the aim of suppressing the new Jewish nation. A war was on.

The U. N. made six appeals to the Jews and Arabs to stop fighting. The sixth appeal was successful; a four-week truce was arranged with the help of Count Folke Bernadotte, of Sweden, whom the U. N. had sent to Palestine as its mediator. With the exception of a few truce violations, an uneasy peace prevailed from June 11 to July 9. Bernadotte offered both sides a plan for a lasting settlement. The Jews rejected his plan, chiefly because he suggested putting Jerusalem under Arab control. And the Arabs rejected the plan because they still refused to recognize the independent state of Israel.

At the expiration of the truce, the Jews were agreeable to an extension proposed by Bernadotte, but the Arabs were determined to resume war, which they did. In the renewed fighting, the Jews made considerable gains. They held nearly all the territory assigned to them under the original U. N. partition plan, together with some territory designated for the Arabs.

On July 15, the Security Council approved a resolution under Chapter VII, Article 39, ordering both sides in Palestine to cease firing, under pain of sanctions. The resolution was passed by the minimum vote of 7-1. Syria opposed; and Russia, the Ukraine and Argentina abstained.

Within a few days, both Israel and the Arab forces ordered cease-fire, and the truce went into effect once again. Its observance was spotty; every now and then gun duels would take place in Jerusalem, or one side would stage a raid on the other. Both sides kept accusing each other of violations.

From his headquarters on the island of Rhodes, the U. N. mediator, Count Bernadotte, kept interviewing both Jews and Arabs in the hope of arranging a lasting settlement. On Sept. 17, while Bernadotte was touring the Jewish-held suburb of Katamon in Jerusalem, gunmen blocked

his automobile and shot him dead at close range. The assassination was generally believed to be the work of the Fighters for Freedom of Israel, commonly known as the Stern gang—a small group of fanatical Jewish terrorists.

THE INDONESIAN CASE

In the last months of 1947, the U. N. Security Council struggled to end the warfare on the island of Java, in the far Pacific, between the military forces of the Netherlands and those of the self-proclaimed Indonesian Republic. The Indonesians had proclaimed their republic in an effort to throw off Dutch colonial rule. The Security Council ordered a truce and sent to Indonesia a Committee of Good Offices, on which were represented the U. S., Australia and Belgium.

On Jan. 17, 1948, the Committee succeeded in effecting a truce. It was agreed that the Dutch and the Indonesians would work out plans for a federal United States of Indonesia to take power by Jan. 1, 1949, as an equal partner with the Netherlands under the Dutch crown.

Having stopped the fighting, the next task of the U. N. Committee was to help bring about the long-range agreement for the Netherlands-Indonesian Union. After five months of effort, the U. N. Committee reported to the Security Council in June that the negotiations had been "largely a disappointment." The Committee said it "wonders indeed whether it has so far helped the parties to achieve anything concrete other than a military truce."

Spokesmen for the Indonesian Republic accused the Dutch of stalling the negotiations in the hope of wearing down the republic and imposing their own rule through Dutch-controlled native states. The Dutch accused the republic of grasping for too much power too quickly.

THE INDIAN CASE

At the beginning of 1948, the U. N. was confronted with a quarrel between the two new independent nations that had been created when the British withdrew from India. The nation now known as India was predominantly Hindu. Its sister nation, Pakistan, was predominantly Moslem.

The states ruled by Indian princes, or maharajas, did not automatically fall under the control of either India or Pakistan. Most of them voluntarily joined one or the other of the new nations, according to their religious leanings. The princely state of Kashmir presented a peculiar problem, because the overwhelming majority of its people were Moslem, while its ruling class was Hindu. The people were inclined toward Pakistan, but the rulers put Kashmir under the protection of India.

Moslem tribesmen invaded Kashmir from

the Northwest Frontier Province. India took the matter to the U. N. Security Council, accusing Pakistan of arming and aiding the tribesmen invading Kashmir. The fighting continued for months, and there was always the danger that it would lead to full-dress war between the two new governments.

The Council sent a commission to the scene and proposed that the people of Kashmir be allowed to vote on whether they would prefer to join India or Pakistan. The two countries rejected the plebiscite proposal in April, each fearful that it would favor the other. India said the Council's first duty was to call Pakistan to account for allegedly helping the Moslem invaders of Kashmir. Pakistan said no plebiscite could be conducted fairly with Kashmir under the control of pro-Indian rulers.

THE BALKAN CASE

A U. N. Balkan Commission had been set up in 1947 to keep a watch over the situation in northern Greece, where Communist-led rebels under General Markos had conquered a small mountainous area and were endeavoring to push southward and overthrow the Athens government.

In September, 1948, the Balkan Commission reported that the three northern neighbors of Greece—Albania, Bulgaria and Yugoslavia—had continued large-scale aid to the Communist rebels within northern Greece. "The conduct of these governments," said the report, "has been inconsistent with the purposes and principles of the United Nations Charter." The Commission called on the Assembly to warn Albania, Bulgaria and Yugoslavia that their conduct threatened the peace in that area.

ATOMIC ENERGY CONTROL

On the last day of 1946, the U. N. Atomic Energy Commission submitted its report to the Security Council, recommending adoption in all essentials of the international control plan originally suggested by the U. S. Ten nations were in favor; Russia withheld approval. In June, 1947, Russia submitted a vastly different plan. For nearly a year the Commission tried in vain to find a way to reconcile Russia's views with those of the other nations.

On May 17, 1948, the U. N. Atomic Energy Commission voted to suspend all work toward international control of atomic power. Nine nations so voted—Argentina, Belgium, Canada, China, Colombia, France, Syria, the United Kingdom and the U. S. Two nations voted no—Russia and the Ukraine.

The Commission majority frankly blamed Russia for the deadlock. They said the Soviet plan for atomic energy control was

"fundamentally inadequate" because it would limit international inspection to such a degree that secret manufacture of atomic bombs could not be discovered. Moreover, it would paralyze effective Security Council action against illegal manufacture by preserving the veto. And it would require the U. S. to get rid of its bombs before—not after—a control system was set up.

The final Commission report compared the Soviet plan of atomic control to international agreements such as the Kellogg-Briand Treaty which, "instead of strengthening peace, actually gave rise to a false security." It noted that the rearmament of Germany between the two world wars was "an obvious example of the possibility of a nation engaging in clandestine activity when there is no genuine international scrutiny."

The Russian viewpoint, set forth by Andrei A. Gromyko, was that the atomic control plan, as approved by the large majority of the Commission, was an American scheme to shackle Russia. "The Soviet Union," he said, "has no intention of placing the fate of its national economy under the protection of U. S. financiers, industrialists and their subordinates, who are attempting to tie the hands and feet of other nations, primarily the Soviet Union."

When the despairing report of the Atomic Energy Commission came before the Security Council, Russia used its 26th veto on June 22 to prevent approval of the control plan endorsed by the majority. This action left atomic energy control completely stymied. Nine nations wanted the system as originally proposed by the U. S.; Russia and the Ukraine did not. However, Russia did not block a vote to toss the unsolved problem to the General Assembly.

ARMAMENTS

The U. N. Commission on Conventional Armaments completed its first eighteen months of work in August, 1948, with a report saying that a general disarmament program could not be put into effect until the international picture was one of confidence. Russia opposed the report, because she had her own ideas on reduction of armaments, which were opposed by all non-Communist nations.

During the Commission's debate, the U. S. declared that Russia spent 16 percent of her budget for military purposes as compared to the 8 percent spent by the U. S. Russia countered with the declaration that the U. S. had 418 bases, half of them in the Pacific, for its air, sea and land forces; and that the bases were "platforms for advances into other continents."

Similarly, no headway was made toward establishing the U. N. international mili-

tary force that was contemplated in the Charter. The U.N. Military Staff Committee, which had been working on the project for more than two years, ran up against two basic disagreements: (1) on the total size of the proposed force; and (2) on the proportions to be furnished by each of the five great powers. Russia said each of the Big Five should make an exactly equal contribution in all types of arms. The four other members of the Big Five insisted that if one country could not supply its quota in one type (China, for example, could make no naval contribution), it should be permitted to make up for it by contributing a larger quota in another.

In the absence of a large-scale military force, Secretary General Trygve Lie suggested on June 10, 1948, that the U.N. establish a modest international guard force of 1,000 to 5,000 members. Its chief purpose would be to strengthen and protect U.N. commissions dispatched to troubled areas (such as Palestine, the Balkans, etc.) and to afford trained observers in any case where truce violations might occur. The U. S. supported Lie.

THE VETO

The countries, both big and small, who were members of the U. N. were impatient at the frequent exercise of the veto privilege by Soviet Russia. The veto privilege meant that any one of the Big Five (China, France, United Kingdom, the U. S. and the U.S.S.R.) could kill, single-handed, any "substantive" action by the Security Council. In Russia's view, almost any Council action was "substantive", and therefore subject to its veto. In preventing the Security Council's approval of atomic energy control, Russia cast its twenty-sixth veto. No other member of the Big Five had approached this record of negating the majority will on the Council.

In the U. S. a strong sentiment developed for modifying drastically the veto privilege in the Council. Sixteen Republican and Democratic Senators suggested that the U. N. Charter be revised to eliminate the veto privilege in cases of aggression. They knew that Russia would not consent to such an amendment; and they favored putting it through, anyway, even if Russia were to withdraw from the U. N. Secretary of State Marshall cautioned against any drastic change in the U. N. Charter that would drive Russia out. "Such a procedure," he said, "would probably destroy the present U. N. organization."

Nevertheless, other nations still were worried about the veto. The Little Assembly (officially known as the Interim Committee of the General Assembly) recommended to its parent that the matter

be taken up with the Big Five, to the end that the veto be voluntarily restricted to cases of "vital importance to the U. N. as a whole."

THE GENERAL ASSEMBLY

The U.N. General Assembly met in Paris on Sept. 21, 1948, for its regular annual session. It faced a more menacing complex of problems than it ever had before.

To the Assembly fell the enormous task of grappling with all the problems mentioned elsewhere in this article—Korea, Italy's colonies, Palestine, Indonesia, India, atomic energy control, disarmament, limitation of the veto. Not to mention other problems that would come up in the course of the session.

The Assembly has no power to command any nation to do anything. It has power only to make recommendations, and that by a two-thirds vote. Therefore, no clear-cut solutions of world problems could be expected as long as Russia and the non-Communist nations remained in fundamental disagreement. Russia, for her part, hoped to use the Assembly as a sounding board for her propaganda, for her accusations of "war mongering" and "imperialism" against the U. S.

The U. S. and the other leaders of the West, for their part, hoped that the Assembly would serve as an instrument for mobilizing the public opinion of the non-Communist world in a display of unity that might serve to check Soviet Russia's headlong career of aggression. (Later details of actions by the General Assembly will be found in this volume in the section entitled "News Record of 1948.")

Subsidiary and Allied U.N. Agencies

Beyond the political front, various agencies of the U. N. were doing constructive work. The World Health Organization, for example, achieved international cooperation which halted the Egyptian cholera epidemic. Also, the WHO joined the International Children's Emergency Fund in fighting tuberculosis. The two agencies undertook to examine 50 million European children, and to vaccinate 15 million of them against the disease. It was the largest single mass immunization program ever undertaken, and it was extended to China and India.

The International Refugee Organization was busy finding homes for displaced persons. More than 200,000 were resettled or repatriated, but another 900,000 were still to be dealt with. Until Aug. 30, 1948, the IRO operated through a preparatory commission. On that day it came officially into existence as a permanent organization with the receipt of formal ratification by the Danish government. That made up the necessary fifteen members, which were:

Australia, Belgium, Canada, China, Denmark, Dominican Republic, France, Guatemala, Iceland, Luxemburg, the Netherlands, New Zealand, Norway, the United Kingdom and the U. S.

Legislation passed by the U. S. greatly aided the work of the IRO, because it afforded an additional haven for Europe's displaced persons. The U. S. agreed to accept as permanent residents a total of 205,000 refugees in a two-year period. The migration began in the autumn of 1948 and was to reach a peak of 8,000 a month.

A Havana conference led fifty-three nations to sign an International Trade Organization charter designed to promote reduction of tariffs and other barriers to the free flow of commerce.

The International Civil Aviation Organization drew up five sets of air standards, designed to promote safe operation.

The International Monetary Fund extended its loans to ten countries to enable them to keep their currencies in order. The World Bank (International Bank for Reconstruction and Development) lent more than half a billion dollars to five nations.

The Food and Agriculture Organization, of which fifty-seven nations were members, had the goal of raising the caloric diet of half the world's people, who were existing on the minimum subsistence level, or less. In order to do so, it sought to increase the production of food, and to facilitate the distribution. For example, the FAO helped Egypt to reduce the amount of grain lost

to rats, insects and fungi. Also, it helped introduce into Europe the hybrid corn that had boosted America's output by 20 percent in the last few decades.

A U. N. conference on freedom of information was held in Geneva, Switzerland, from March 23 to April 21, 1948. By a majority vote, the conference approved a convention, proposed by the U. S., which was designed to facilitate the work of foreign news correspondents in all countries. Soviet Russia and its neighboring countries (the Ukraine, Byelorussia, Yugoslavia, Czechoslovakia and Poland) voted against the proposed convention, thereby negating its universality.

The seventh meeting of the U.N. Economic and Social Council opened July 19, 1948, in Geneva, Switzerland. Soviet Russia attempted to use the Council as a sounding board for her contention that the Soviet Union is the leader of all progressive forces of the world concerned with oppressed minorities, racial discrimination, exploitation of labor, and other social evils.

On Sept. 14, 1948, ground was broken for construction of permanent headquarters of the U.N. on the Manhattan shore of New York City's East River. The huge building project was expected to continue at least through the summer of 1950 at an estimated cost of \$65,000,000. This amount was lent to the U.N., interest-free, by the U. S. The two main structures contemplated were the 39-story, \$20,000,000 Secretariat Building, and a large General Assembly Building.

Delegation Heads to the United Nations

(Permanent representative, unless otherwise indicated)

AFGHANISTAN: Mr. Abdul Aziz; 147-35 Village Rd., Jamaica 2, N. Y.

ARGENTINA: Dr. José Arce; 350 Fifth Ave., Rms. 6224-25, N. Y. C. 1.

AUSTRALIA: Mr. J. D. L. Hood, Minister in charge of Mission to U.N.; 350 Fifth Ave., Rm. 4510, N. Y. C. 1.

BELGIUM: M. Fernand van Langenhove; 630 Fifth Ave., Rm. 3001, N. Y. C. 20.

BOLIVIA: Sr. Eduardo Anze Matienzo; 350 Fifth Ave., Rm. 6305, N. Y. C. 1.

BRAZIL: Mr. João Carlos Muniz; 350 Fifth Ave., Rm. 6005, N. Y. C. 1.

BYELORUSSIAN S.S.R.: Mr. Leonid I. Kaminsky; 30 E. 37th St., N. Y. C.

CANADA: Gen. A. G. L. McNaughton; 630 Fifth Ave., Rm. 3320, N. Y. C. 20.

CHILE: Sr. Hernán Santa Cruz; 350 Fifth Ave., Rm. 6002, N. Y. C. 1.

CHINA: Dr. Ting-Fu Tsiang; 350 Fifth Ave., Rm. 6301, N. Y. C. 1.

COLOMBIA: Dr. Alfonso Lopez; 350 Fifth Ave., Rm. 6223, N. Y. C. 1.

COSTA RICA: Dr. Ricardo Fournier; Hotel New Yorker, Rm. 1682, 8th Ave. & 34th St., N. Y. C. 1.

CUBA: Dr. Guillermo Belt; 2630 Sixteenth St., Washington 9, D. C.

CZECHOSLOVAKIA: Dr. Vladimir Houdek; 1775 Broadway, N. Y. C. 19.

DENMARK: Mr. William Borberg; 350 Fifth Ave., Rm. 6300-B, N. Y. C. 1.

DOMINICAN REPUBLIC: Dr. Max Henriquez-Urena; 8 E. 63rd St., N. Y. C. 21.

ECUADOR: Dr. José A. Correa; Perm. Sec. Gen. of Ecuador Del.; 350 Fifth Ave., Rm. 6219, N. Y. C. 1.

EGYPT: Mahmoud Bey Fawzi; 350 Fifth Ave., Rm. 6201, N. Y. C. 1.

FRANCE: M. Alexandre Parodi; 4 E. 79th St., N. Y. C. 21.

GREECE: M. Alexis Kyrour; Hotel Sherry-Netherlands, Suite 704, Fifth Ave. & 59th St., N. Y. C. 22.

GUATEMALA: Dr. Carlos Garcia Bauer; c/o Consulate General of Guatemala, 30 Rockefeller Plaza, N. Y. C. 20.

HAITI: M. Émile Saint-Lot; 146-56 Bayside Ave., Flushing, N. Y.

ICELAND: Mr. Thor Thors; 909 Sixteenth St., Washington, D. C.

INDIA: Dr. P. P. Pillai, Rep. to U.N.; 350 Fifth Ave., Rm. 6212, N. Y. C. 1.

IRAN: Mr. Nasrollah Entezam; 350 Fifth Ave., Rm. 6006, N. Y. C. 1.

MEXICO: Dr. Luis Padilla Nervo; 350 Fifth Ave., Rm. 6003, N. Y. C. 1.

NETHERLANDS: Jonkheer J. W. M. Snouck Hurgronje; 10 Rockefeller Plaza, Rm. 301, N. Y. C. 20.

NEW ZEALAND: Dr. W. B. Sutch, Sec. Gen. of N. Z. Del.; 350 Fifth Ave., Rm. 6004, N. Y. C. 1.

NICARAGUA: Dr. Guillermo Sevilla-Sacasa; 1627 New Hampshire Ave., Washington 9, D. C.

NORWAY: Mr. Finn Moe; 350 Fifth Ave., Rm. 6228, N. Y. C. 1.

PANAMÁ: Sr. Manuel de J. Quijano; 350 Fifth Ave., Rm. 6304, N. Y. C. 1.

PERU: Sr. Carlos Holguin de Lavalle; 350 Fifth Ave., Rm. 6207, N. Y. C. 1.

PHILIPPINES: Brig. Gen. Carlos P. Romulo; 350 Fifth Ave., Rm. 6231, N. Y. C. 1.

POLAND: Mr. Juliusz Katz-Suchy; 151 E. 67th St., N. Y. C. 21.

SIAM: Prince Wan Waithayakon; 2490 Tracy Pl., Washington 8, D. C.

SWEDEN: Mr. Gunnar Häggblöf; 63 E. 64th St., N. Y. C. 21.

SYRIA: Faris Bey el-Khourl; 350 Fifth Ave., Rm. 4512, N. Y. C. 1.

TURKEY: Mr. Selim Sarper; 350 Fifth Ave., Rm. 6300-A, N. Y. C. 1.

UNION OF SOUTH AFRICA: Mr. H. T. Andrews; 405 E. 42nd St., N. Y. C. 17.

U.S.S.R.: Mr. Jacob A. Malik; 680 Park Ave., N. Y. C. 21.

UNITED KINGDOM: Sir Alexander Cadogan; 350 Fifth Ave., 61st Fl., N. Y. C. 1.

UNITED STATES: Mr. Warren R. Austin; 2 Park Ave., N. Y. C. 16.

URUGUAY: Prof. Enrique Rodriguez Fabregat; 55 E. 10th St., Rm. 1506, N. Y. C. 3.

VENEZUELA: Dr. Carlos Eduardo Stolk; 350 Fifth Ave., Rm. 6232, N. Y. C. 1.

YUGOSLAVIA: Dr. Joza Vilfan; 854 Fifth Ave., N. Y. C. 21.

Countries Rejected for U.N. Membership

Country	Date of vote	Vote*
Albania.....	Aug. 29, 1946	5-3-3
Albania.....	Aug. 18, 1947	3-4-4
Austria.....	Aug. 21, 1947	8-1-2†
Bulgaria.....	Aug. 21, 1947	1-1-9
Bulgaria.....	Oct. 1, 1947	1-3-7
Ceylon.....	Aug. 18, 1948	9-2-0†
Eire.....	Aug. 29, 1946	9-1-1†
Eire.....	Aug. 18, 1947	9-1-1†
Finland.....	Oct. 1, 1947	9-2-0†
Hungary.....	Aug. 21, 1947	1-1-9
Hungary.....	Oct. 1, 1947	5-0-6
Italy.....	Aug. 21, 1947	9-1-1†
Italy.....	Oct. 1, 1947	9-2-0†
Italy.....	Apr. 10, 1948	9-2-0†
Outer Mongolia.....	Aug. 29, 1946	6-3-2
Outer Mongolia.....	Aug. 18, 1947	3-3-5
Portugal.....	Aug. 29, 1946	8-2-1†
Portugal.....	Aug. 18, 1947	9-2-0†
Rumania.....	Aug. 21, 1947	1-0-10
Rumania.....	Oct. 1, 1947	4-0-7
Trans-Jordan.....	Aug. 29, 1946	8-2-1†
Trans-Jordan.....	Aug. 18, 1947	9-1-1†

*Security Council vote: for—against—abstaining. Unless vetoed, acceptance requires seven affirmative votes. †Vetoed by U.S.S.R.

Judges of International Court of Justice

(Judges serve for a nine-year term and may be re-elected. In the first election of Feb. 6, 1946, however, they were designated for terms of three, six and nine years, and the expiration dates are shown in parentheses. The seat of the Court is at The Hague, Netherlands.)

President: José G. Guerrero, El Salvador (1955)

Vice President: Jules Basdevant, France (1955)

Alejandro Alvarez, Chile (1955)

Abdel Hamid Badawi Pasha, Egypt (1949)

J. Philadelpho de Barros e Azevedo, Brazil (1955)

Isidro Fabela Alfaro, Mexico (1952)

Green H. Hackworth, U. S. (1952)

Hsu Mo, China (1949)

Helge Klaestad, Norway (1952)

Sergei B. Krylov, U.S.S.R. (1952)

Sir Arnold D. McNair, U.K. (1952)

John M. Read, Canada (1949)

Charles de Visscher, Belgium (1952)

Bohdan Winarski, Poland (1949)

Milovan Zoritch, Yugoslavia (1949)

THE FLAG OF THE UNITED NATIONS

The Legal Commission of the General Assembly unanimously adopted the following U. N. flag design on October 7, 1947: white U. N. emblem (global map projected from the north pole and embraced in twin olive branches) centered on a rectangular blue banner.

The 58 Members of the United Nations, Oct., 1948

Country	Entered WW II	Signed U.N. Decla- ration ¹	Joined U.N. Organi- zation ²	Security Council	Econ. & Soc. Council	Trustee- ship Council	League of Nations ³
Afghanistan.....			1946				1934-46
Argentina.....	1945	1945	1945	1948-49			1919-46
Australia.....	1939	1942	1945	1946-47	1948-50	Perm.	1920-46
Belgium.....	1940	1942	1945	1947-48	1946-46	Perm.	120-46
Bolivia.....	1943	1943	1945				192-46
Brazil.....	1942	1943	1945	1946-47	1948-50		1920-2
Burma.....	1941		1948				
Byelorussian S.S.R. ⁴	1941		1945		1947-49		
Canada.....	1939	1942	1945	1948-49	1946-48		1920-46
Chile.....	1945	1945	1945		1946-48		1919-40
China.....	1941	1942	1945	Perm.	1946-48	Perm.	1920-46
Colombia.....	1944	1944	1945	1947-48	1946-46		1920-46
Costa Rica.....	1941	1942	1945			1947-49	1920-26
Cuba.....	1941	1942	1945	1949-50	1946-47		1920-46
Czechoslovakia.....	1939	1942	1945		1946-47		1920-46
Denmark ⁵	1940		1945		1948-50		1920-46
Dominican Republic.....	1941	1942	1945				1924-46
Ecuador.....	1945	1945	1945				1934-46
Egypt.....	1945	1945	1945	1949-50 ⁷			1937-46
El Salvador.....	1941	1942	1945				1920-39
Ethiopia.....	1942	1943	1945				1923-46
France.....	1939	1945	1945	Perm.	1946-48	Perm.	1920-46
Greece.....	1940	1942	1945		1946-46		1920-46
Guatemala.....	1941	1942	1945				1920-38
Haiti.....	1941	1942	1945				1920-44
Honduras.....	1941	1942	1945				1920-38
Iceland.....			1946				
India.....	1939	1942	1945		1946-47		1920-46
Iran.....	1943	1943	1945				1919-46
Iraq.....	1943	1943	1945			1947-49	1932-46
Lebanon.....	1945	1945	1945		1946-49		
Liberia.....	1944	1944	1945				1920-46
Luxemburg.....	1940	1942	1945			1947-49	1931-46
Mexico.....	1942	1942	1945	1946-46			1920-46
Netherlands.....	1940	1942	1945	1946-46	1946-48		1920-46
New Zealand.....	1939	1942	1945		1947-49	Perm.	1920-46
Nicaragua.....	1941	1942	1945				1920-38
Norway.....	1940	1942	1945	1949-50	1946-47		1920-46
Pakistan.....	1939		1947				
Panamá.....	1942	1942	1945				1920-46
Paraguay.....	1945	1945	1945				1920-37
Peru.....	1945	1945	1945		1946-48		1920-41
Philippines.....	1941	1942	1945			1947-49	
Poland ⁶	1939	1942	1945	1946-47	1948-50		1920-46
Saudi Arabia.....	1945	1945	1945				
Siam.....	1941		1946				1920-46
South Africa, U. of.....	1939	1942	1945				1920-46
Sweden.....			1946				1920-46
Syria.....	1945	1945	1945	1947-48			1932-46
Turkey.....	1945	1945	1945		1947-49		
Ukrainian S.S.R. ⁴	1941		1945	1948-49	1946-46		
United Kingdom.....	1939	1942	1945	Perm.	1946-50	Perm.	1920-46
United States.....	1941	1942	1945	Perm.	1946-49	Perm.	
U.S.S.R.....	1941	1942	1945	Perm.	1946-50	Perm.	1934-39
Uruguay.....	1945	1945	1945				1920-46
Venezuela.....	1945	1945	1945		1947-49		1920-40
Yemen.....			1947				
Yugoslavia.....	1941	1942	1945		1946-46		1920-46

¹Declaration of United Nations was originally signed by 26 nations in Washington, D.C., on Jan. 1, 1942.
²U.N. officially came into existence Oct. 24, 1945. ³League was formally dissolved Apr. 18, 1946. Nations withdrawing before that time did so voluntarily, except U.S.S.R., which was expelled. Other members of League were: Albania (1920-46), Austria (1920-40), Bulgaria (1920-46), Eire (1923-46), Estonia (1921-46), Finland (1920-46), Germany (1926-35), Hungary (1922-41), Italy (1920-39), Japan (1920-35), Latvia (1921-46), Lithuania (1921-46), Portugal (1920-46), Rumania (1920-42), Spain (1920-41), Switzerland (1920-46).
⁴Admission as separate nation approved at San Francisco Conference. ⁵Invited to attend San Francisco Conference June 5, 1945, after its liberation. ⁶Not represented at San Francisco Conference, but subsequently signed Charter as original member. ⁷Previously held 1-year term in 1946.

Specialized Agencies of the United Nations

Source: U.N. Dept. of Public Information.

Food and Agriculture Organization (FAO)

Established: Oct. 16, 1945, when constitution was signed in Quebec.

Purposes: To raise nutrition levels and living standards; to secure improvements in production and distribution of food and agricultural products; to better condition of country dwellers; by these means, to contribute to expanding world economy.

Headquarters: 1201 Connecticut Ave., Washington 6, D.C.

International Bank for Reconstruction and Development (BANK)

Established: Dec. 27, 1945, when 28 nations signed Articles of Agreement drawn up at Bretton Woods Conference in July, 1944.

Purposes: To assist in reconstruction and development of territories of members; to promote private foreign investment; to promote balanced growth of international trade and maintain equilibrium in balance of payments.

Headquarters: 1818 H St., Washington 25, D.C.

International Civil Aviation Organization (ICAO)

Established: Apr. 4, 1947, when 28th nation ratified Convention on International Civil Aviation drawn up at Chicago Civil Air Conference on Dec. 7, 1944.

Purposes: To study problems of international civil aviation and establish international standards and regulations.

Headquarters: Dominion Square Bldg., Montreal, Can.

International Labor Organization (ILO)

Established: Apr. 11, 1919, when constitution was adopted as Part XIII of Treaty of Versailles.

Purposes: To contribute to establishment of lasting peace by promoting social justice; to improve, through international action, labor conditions and living standards; to promote economic and social stability.

Headquarters: Montreal 25, Can.

International Monetary Fund (FUND)

Established: Dec. 27, 1945, when nations whose quotas amounted to 80% of Fund's resources had deposited ratifications of Bretton Woods Agreement.

Purposes: To promote international monetary cooperation and expansion of international trade; to promote exchange stability; to assist in establishment of multilateral system of payments in respect of current transactions between members.

Headquarters: 1818 H St., Wash. 25, D.C.

International Refugee Organization (IRO)

Established: Will not come into existence until 15 U.N. members contributing at least 75 percent of operational expenses have become party to constitution.

Purposes: To assist in repatriation and resettlement of refugees and displaced persons; to protect their rights and offer them care and assistance.

International Telecommunication Union (ITU)

Established: Dec. 9, 1932, by International Telecommunication Convention adopted at Madrid Conference and effective Jan., 1934.

Purposes: To set up international regulations for radio, telegraph and telephone services in order to avoid confusion; to study means to decrease excessive costs.

Headquarters: Geneva, Switz.

International Trade Organization (ITO)

Established: Will not come into existence until 60 days after charter is ratified by majority of 53 countries (or by 20 countries by April, 1949) that approved it Mar. 24, 1948, at International Conference on Trade and Unemployment at Havana, Cu.

Purposes: To promote expansion of world trade and removal of trade barriers.

United Nations Educational, Scientific and Cultural Organization (UNESCO)

Established: Nov. 4, 1946, when 20th signatory to constitution deposited instrument of acceptance with government of United Kingdom.

Purposes: To promote collaboration among nations through education, science and culture in order to further justice, rule of law and human rights and freedoms without distinction of race, sex, language or religion.

Headquarters: 19 Ave. Kléber, Paris 16, Fr.

Universal Postal Union (UPU)

Established: Oct. 9, 1874, by Postal Convention of Bern, Switz., eff. July 1, 1875.

Purposes: To alleviate uncertainty, confusion and excessive cost of international postal communications by uniting member countries into single postal territory for reciprocal exchange of mail.

Headquarters: Schwartzstrasse 38, Bern.

World Health Organization (WHO)

Established: Apr. 7, 1948, when 26th nation ratified constitution adopted July 22, 1946, by Intl. Health Conference in N.Y.C.

Purposes: To aid attainment by all peoples of highest possible level of health.

Headquarters: Geneva, Switz.

CHARTER OF THE UNITED NATIONS

WE, the peoples of the United Nations determined to save succeeding generations from the scourge of war, which twice in our lifetime has brought untold sorrow to mankind, and

To reaffirm faith in fundamental human rights, in the dignity and worth of the human person, in the equal rights of men and women and of nations large and small, and

To establish conditions under which justice and respect for the obligations arising from treaties and other sources of international law can be maintained, and

To promote social progress and better standards of life in larger freedom, and for these ends

To practice tolerance and live together in peace with one another as good neighbors, and

To unite our strength to maintain international peace and security, and

To insure, by the acceptance of principles and the institution of methods, that armed force shall not be used, save in the common interest, and

To employ international machinery for the promotion of the economic and social advancement of all peoples, have resolved to combine our efforts to accomplish these aims.

Accordingly, our respective governments, through representatives assembled in the city of San Francisco, who have exhibited their full powers found to be in good and due form, have agreed to the present Charter of the United Nations and do hereby establish an international organization to be known as the United Nations.

CHAPTER I

Purposes and Principles

Article 1

The purposes of the United Nations are:

1. To maintain international peace and security, and to that end: to take effective collective measures for the prevention and removal of threats to the peace, and for the suppression of acts of aggression or other breaches of the peace, and to bring about by peaceful means, and in conformity with the principles of justice and international law, adjustment or settlement of international disputes or situations which might lead to a breach of the peace;

2. To develop friendly relations among nations based on respect for the principle of equal rights and self-determination of peoples, and to take other appropriate measures to strengthen universal peace;

3. To achieve international cooperation in solving international problems of an economic, social, cultural or humanitarian

character, and in promoting and encouraging respect for human rights and for fundamental freedoms for all without distinction as to race, sex, language or religion; and

4. To be a center for harmonizing the actions of nations in the attainment of these common ends.

Article 2

The organization and its members, in pursuit of the purposes stated in Article 1, shall act in accordance with the following principles:

1. The organization is based on the principle of the sovereign equality of all its members.

2. All members, in order to ensure to all of them the rights and benefits resulting from membership, shall fulfill in good faith the obligations assumed by them in accordance with the present Charter.

3. All members shall settle their international disputes by peaceful means in such a manner that international peace and security, and justice, are not endangered.

4. All members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state, or in any other manner inconsistent with the purposes of the United Nations.

5. All members shall give the United Nations every assistance in any action it takes in accordance with the present Charter, and shall refrain from giving assistance to any state against which the United Nations is taking preventive or enforcement action.

6. The organization shall ensure that states not members of the United Nations act in accordance with these principles so far as may be necessary for the maintenance of international peace and security.

7. Nothing contained in the present Charter shall authorize the United Nations to intervene in matters which are essentially within the domestic jurisdiction of any state or shall require the members to submit such matters to settlement under the present Charter; but this principle shall not prejudice the application of enforcement measures under Chapter VII.

CHAPTER II

Membership

Article 3

The original members of the United Nations shall be the states which, having participated in the United Nations Conference on International Organization at San Francisco, or have previously signed

the Declaration by United Nations of Jan. 1, 1942, sign the present Charter and ratify it in accordance with Article 110.

Article 4

1. Membership in the United Nations is open to all other peace-loving states which accept the obligations contained in the present Charter and, in the judgment of the organization, are able and willing to carry out these obligations.

2. The admission of any such state to membership in the United Nations will be effected by a decision of the General Assembly upon the recommendation of the Security Council.

Article 5

A member of the United Nations against which preventive or enforcement action has been taken by the Security Council may be suspended from the exercise of the rights and privileges of membership by the General Assembly upon the recommendation of the Security Council. The exercise of these rights and privileges may be restored by the Security Council.

Article 6

A member of the United Nations which has persistently violated the principles contained in the present Charter may be expelled from the organization by the General Assembly upon the recommendation of the Security Council.

CHAPTER III

Organs

Article 7

1. There are established as the principal organs of the United Nations: A General Assembly, a Security Council, an Economic and Social Council, a Trusteeship Council, an International Court of Justice and a Secretariat.

2. Such subsidiary organs as may be found necessary may be established in accordance with the present Charter.

Article 8

The United Nations shall place no restrictions on the eligibility of men and women to participate in any capacity and under conditions of equality in its principal and subsidiary organs.

CHAPTER IV

The General Assembly

Composition

Article 9

The General Assembly shall consist of all the members of the United Nations.

Each member shall not have more than five representatives in the General Assembly.

Functions and Powers

Article 10

The General Assembly may discuss any questions or any matters within the scope of the present Charter or relating to the powers and functions of any organs provided for in the present Charter, and, except as provided in Article 12, may make recommendations to the members of the United Nations or to the Security Council, or to both, on any such questions or matters.

Article 11

1. The General Assembly may consider the general principles of cooperation in the maintenance of international peace and security, including the principles governing disarmament and the regulation of armaments, and may make recommendations with regard to such principles to the members or to the Security Council or to both.

2. The General Assembly may discuss any questions relating to the maintenance of international peace and security brought before it by any member of the United Nations, or by the Security Council, or by a state, which is not a member of the United Nations, in accordance with Article 35, Paragraph 2, and, except as provided in Article 12, may make recommendations with regard to any such questions to the state or states concerned or to the Security Council, or both. Any such question on which action is necessary shall be referred to the Security Council by the General Assembly either before or after discussion.

3. The General Assembly may call the attention of the Security Council to situations which are likely to endanger international peace and security.

4. The powers of the General Assembly set forth in this Article shall not limit the general scope of Article 10.

Article 12

1. While the Security Council is exercising in respect of any dispute or situation the functions assigned to it in the present Charter, the General Assembly shall not make any recommendation with regard to that dispute or situation unless the Security Council so requests.

2. The Secretary-General, with the consent of the Security Council, shall notify the General Assembly at each session of any matters relative to the maintenance of international peace and security which are being dealt with by the Security Council and shall similarly notify the General Assembly, or the members of the United Na-

tions if the General Assembly is not in session, immediately the Security Council ceases to deal with such matters.

Article 13

1. The General Assembly shall initiate studies and make recommendations for the purpose of:

(a) Promoting international cooperation in the political field and encouraging the progressive development of international law and its codification;

(b) Promoting international cooperation in the economic, social, cultural, educational and health fields and assisting in the realization of human rights and fundamental freedoms for all without distinction as to race, sex, language or religion.

2. The further responsibilities, functions and powers of the General Assembly with respect to matters mentioned in Paragraph 1(b) above are set forth in Chapters IX and X.

Article 14

Subject to the provisions of Article 12, the General Assembly may recommend measures for the peaceful adjustment of any situation, regardless of origin, which it deems likely to impair the general welfare or friendly relations among nations, including situations resulting from a violation of the provisions of the present Charter setting forth the purposes and principles of the United Nations.

Article 15

1. The General Assembly shall receive and consider annual and special reports from the Security Council; these reports shall include an account of the measures that the Security Council has decided upon or taken to maintain international peace and security.

2. The General Assembly shall receive and consider reports from the other organs of the United Nations.

Article 16

The General Assembly shall perform such functions with respect to the international trusteeship system as are assigned to it under Chapters XII and XIII, including the approval of the trusteeship agreements for areas not designated as strategic.

Article 17

1. The General Assembly shall consider and approve the budget of the organization.

2. The expenses of the organization shall be borne by the members as apportioned by the General Assembly.

3. The General Assembly shall consider and approve any financial and budgetary arrangements with specialized agencies re-

ferred to in Article 57 and shall examine the administrative budgets of such specialized agencies with a view to making recommendations to the agencies concerned.

Voting

Article 18

1. Each member of the General Assembly shall have one vote.

2. Decisions of the General Assembly on important questions shall be made by a two-thirds majority of the members present and voting. These questions shall include: recommendations with respect to the maintenance of international peace and security, the election of the non-permanent members of the Security Council, and election of the members of the Economic and Social Council, the election of members of the Trusteeship Council in accordance with Paragraph 1(c) of Article 86, the admission of new members to the United Nations, the suspension of the rights and privileges of membership, the expulsion of members, questions relating to the operation of the trusteeship system, and budgetary questions.

3. Decisions on other questions, including the determination of additional categories of questions to be decided by a two-thirds majority, shall be made by a majority of the members present and voting.

Article 19

A member of the United Nations which is in arrears in the payment of its financial contributions to the organization shall have no vote in the General Assembly if the amount of its arrears equals or exceeds the amount of the contributions due from it for the preceding two full years. The General Assembly may, nevertheless, permit such a member to vote if it is satisfied that the failure to pay is due to conditions beyond the control of the member.

Procedure

Article 20

The General Assembly shall meet in regular annual sessions and in such special sessions as occasion may require. Special sessions shall be convoked by the Secretary-General at the request of the Security Council or of a majority of the members of the United Nations.

Article 21

The General Assembly shall adopt its own rules of procedure. It shall elect its president for each session.

Article 22

The General Assembly may establish such subsidiary organs as it deems necessary for the performance of its functions.

CHAPTER V

The Security Council**Composition****Article 23**

1. The Security Council shall consist of eleven members of the United Nations. The Republic of China, France, the Union of Soviet Socialist Republics, the United Kingdom of Great Britain and Northern Ireland, and the United States of America, shall be permanent members of the Security Council. The General Assembly shall select six other members of the United Nations to be non-permanent members of the Security Council, due regard being specially paid, in the first instance to the contribution of members of the United Nations to the maintenance of international peace and security and to the other purposes of the organization, and also to equitable geographical distribution.

2. The non-permanent members of the Security Council shall be elected for a term of two years. In the first election of the non-permanent members, however, three shall be chosen for a term of one year. A retiring member shall not be eligible for immediate re-election.

3. Each member of the Security Council shall have one representative.

Functions and Powers**Article 24**

1. In order to insure prompt and effective action by the United Nations, its members confer on the Security Council primary responsibility for the maintenance of international peace and security, and agree that in carrying out its duties under this responsibility the Security Council acts on their behalf.

2. In discharging these duties the Security Council shall act in accordance with the purposes and principles of the United Nations. The specific powers granted to the Security Council for the discharge of these duties are laid down in Chapters VI, VII, VIII and XII.

3. The Security Council shall submit annual and, when necessary, special reports to the General Assembly for its consideration.

Article 25

The members of the United Nations agree to accept and carry out the decisions of the Security Council in accordance with the present Charter.

Article 26

In order to promote the establishment and maintenance of international peace and security with the least diversion for armaments of the world's human and eco-

nomic resources, the Security Council shall be responsible for formulating, with the assistance of the Military Staff Committee, referred to in Article 47, plans to be submitted to the members of the United Nations for the establishment of a system for the regulation of armaments.

Voting**Article 27**

1. Each member of the Security Council shall have one vote.

2. Decisions of the Security Council on procedural matters shall be made by an affirmative vote of seven members.

3. Decisions of the Security Council on all other matters shall be made by an affirmative vote of seven members including the concurring votes of the permanent members; provided that, in decisions under Chapter VI and under Paragraph 3 of Article 52 a party to a dispute shall abstain from voting.

Procedure**Article 28**

1. The Security Council shall be so organized as to be able to function continuously. Each member of the Security Council shall for this purpose be represented at all times at the seat of the organization.

2. The Security Council shall hold periodic meetings at which each of its members may, if it so desires, be represented by a member of the government or by some other specially designated representative.

3. The Security Council may hold meetings at such places other than the seat of the organization as in its judgment will best facilitate its work.

Article 29

The Security Council may establish such subsidiary organs as it deems necessary for the performance of its functions.

Article 30

The Security Council shall adopt its own rules of procedure, including the method of selecting its president.

Article 31

Any member of the United Nations which is not a member of the Security Council may participate, without vote, in the discussion of any question brought before the Security Council whenever the latter considers that the interests of that member are specially affected.

Article 32

Any member of the United Nations which is not a member of the Security Council or

any state which is not a member of the United Nations, if it is a party to a dispute under consideration by the Security Council, shall be invited to participate, without vote, in the discussion relating to the dispute. The Security Council shall lay down such conditions as it deems just for the participation of a state which is not a member of the United Nations.

CHAPTER VI

Pacific Settlement of Disputes

Article 33

1. The parties to any dispute, the continuance of which is likely to endanger the maintenance of international peace and security, shall, first of all, seek a solution by negotiation, inquiry, mediation, conciliation, arbitration, judicial settlement, resort to regional agencies or arrangements, or other peaceful means of their own choice.

2. The Security Council shall, when it deems necessary, call upon the parties to settle their dispute by such means.

Article 34

The Security Council may investigate any dispute, or any situation which might lead to international friction or give rise to a dispute, in order to determine whether the continuance of the dispute or situation is likely to endanger the maintenance of international peace and security.

Article 35

1. Any member of the United Nations may bring any dispute or any situation of the nature referred to in Article 34 to the attention of the Security Council or of the General Assembly.

2. A state which is not a member of the United Nations may bring to the attention of the Security Council or of the General Assembly any dispute to which it is a party if it accepts in advance, for the purposes of the dispute, the obligations of pacific settlement provided in the present Charter.

3. The proceedings of the General Assembly in respect of matters brought to its attention under this Article will be subject to the provisions of Articles 11 and 12.

Article 36

1. The Security Council may, at any stage of a dispute of the nature referred to in Article 33 or of a situation of like nature, recommend appropriate procedures or methods of adjustment.

2. The Security Council should take into consideration any procedures for the settlement of the dispute which have already been adopted by the parties.

3. In making recommendations under this Article the Security Council should also take into consideration that legal disputes should as a general rule be referred by the parties to the International Court of Justice in accordance with the provisions of the statute of the Court.

Article 37

1. Should the parties to a dispute of the nature referred to in Article 33 fail to settle it by the means indicated in that Article, they shall refer it to the Security Council.

2. If the Security Council deems that the continuance of the dispute is in fact likely to endanger the maintenance of international peace and security, it shall decide whether to take action under Article 36 or to recommend such terms of settlement as it may consider appropriate.

Article 38

Without prejudice to the provisions of Articles 33 to 37 the Security Council may, if all the parties to any dispute so request, make recommendations to the parties with a view to a pacific settlement of the dispute.

CHAPTER VII

Action with Respect to Threats to the Peace, Breaches of the Peace, and Acts of Aggression

Article 39

The Security Council shall determine the existence of any threat to the peace, breach of the peace, or act of aggression and shall make recommendations, or decide what measures shall be taken in accordance with Articles 41 and 42, to maintain or restore international peace and security.

Article 40

In order to prevent an aggravation of the situation, the Security Council may, before making the recommendations or deciding upon the measures provided for in Article 39, call upon the parties concerned to comply with such provisional measures as it deems necessary or desirable. Such provisional measures shall be without prejudice to the rights, claims, or position of the parties concerned. The Security Council shall duly take account of failure to comply with such provisional measures.

Article 41

The Security Council may decide what measures not involving the use of armed force are to be employed to give effect

to its decisions, and it may call upon members of the United Nations to apply such measures. These may include complete or partial interruption of economic relations and of rail, sea, air, postal, telegraphic, radio, and other means of communication, and the severance of diplomatic relations.

Article 42

Should the Security Council consider that measures provided for in Article 41 would be inadequate, or have proved to be inadequate, it may take such action by air, sea or land forces as may be necessary to maintain or restore international peace and security. Such action may include demonstrations, blockade, and other operations by air, sea or land forces of members of the United Nations.

Article 43

1. All members of the United Nations, in order to contribute to the maintenance of international peace and security, undertake to make available to the Security Council, on its call and in accordance with a special agreement or agreements, armed forces, assistance, and facilities, including rights of passage, necessary for the purpose of maintaining international peace and security.

2. Such agreement or agreements shall govern the numbers and types of forces, their degree of readiness and general location, and the nature of the facilities and assistance to be provided.

3. The agreement or agreements shall be negotiated as soon as possible on the initiative of the Security Council. They shall be concluded between the Security Council and members or between the Security Council and groups of members and shall be subject to ratification by the signatory states in accordance with their respective constitutional processes.

Article 44

When the Security Council has decided to use force it shall, before calling upon a member not represented on it to provide armed forces in fulfillment of the obligations assumed under Article 43, invite that member, if the member so desires, to participate in the decisions of the Security Council concerning the employment of contingents of that member's armed forces.

Article 45

In order to enable the United Nations to take urgent military measures, members shall hold immediately available national air force contingents for combined international enforcement action. The strength and degree of readiness of these contingents and plans for their combined action shall be determined, within the limits

laid down in the special agreement or agreements referred to in Article 43, by the Security Council with the assistance of the Military Staff Committee.

Article 46

Plans for the application of armed force shall be made by the Security Council with the assistance of the Military Staff Committee.

Article 47

1. There shall be established a Military Staff Committee to advise and assist the Security Council on all questions relating to the Security Council's military requirements for the maintenance of international peace and security, the employment and command of forces placed at its disposal, the regulation of armaments, and possible disarmament.

2. The Military Staff Committee shall consist of the Chiefs of Staff of the permanent members of the Security Council or their representatives. Any member of the United Nations not permanently represented on the Committee shall be invited by the Committee to be associated with it when the efficient discharge of the Committee's responsibilities requires the participation of that member in its work.

3. The Military Staff Committee shall be responsible, under the Security Council, for the strategic direction of any armed forces placed at the disposal of the Security Council. Questions relating to the command of such forces shall be worked out subsequently.

4. The Military Staff Committee, with the authorization of the Security Council and after consultation with appropriate regional agencies, may establish regional subcommittees.

Article 48

1. The action required to carry out the decisions of the Security Council for the maintenance of international peace and security shall be taken by all the members of the United Nations, or by some of them, as the Security Council may determine.

2. Such decisions shall be carried out by the members of the United Nations directly and through their action in the appropriate international agencies of which they are members.

Article 49

The members of the United Nations shall join in affording mutual assistance in carrying out the measures decided upon by the Security Council.

Article 50

If preventive or enforcement measures against any state are taken by the Security Council, any other state, whether a

member of the United Nations or not, which finds itself confronted with special economic problems arising from the carrying out of those measures shall have the right to consult the Security Council with regard to a solution of those problems.

Article 51

Nothing in the present Charter shall impair the inherent right of individual or collective self-defense, if an armed attack occurs against a member of the United Nations, until the Security Council has taken the measures necessary to maintain international peace and security. Measures taken by members in the exercise of this right of self-defense shall be immediately reported to the Security Council and shall not in any way affect the authority and responsibility of the Security Council under the present Charter to take at any time such action as it deems necessary in order to maintain or restore international peace and security.

CHAPTER VIII

Regional Arrangements

Article 52

1. Nothing in the present Charter precludes the existence of regional arrangements or agencies for dealing with such matters relating to the maintenance of international peace and security as are appropriate for regional action, provided that such arrangements or agencies and their activities are consistent with the purposes and principles of the organization.

2. The members of the United Nations entering into such arrangements or constituting such agencies shall make every effort to achieve pacific settlement of local disputes through such regional arrangements or by such regional agencies before referring them to the Security Council.

3. The Security Council shall encourage the development of pacific settlement of local disputes through such regional arrangements or by such regional agencies either on the initiative of the states concerned or by reference from the Security Council.

4. This Article in no way impairs the application of Articles 34 and 35.

Article 53

1. The Security Council shall, where appropriate, utilize such regional arrangements or agencies for enforcement action under its authority. But no enforcement action shall be taken under regional arrangements or by regional agencies without the authorization of the Security Council, with the exception of measures against any enemy state, as defined in Para-

graph 2 of this Article, provided for pursuant to Article 107, or in regional arrangements directed against renewal of aggressive policy on the part of any such state, until such time as the organization may, on request of the governments concerned, be charged with the responsibility for preventing further aggression by such a state.

2. The term enemy state as used in Paragraph 1 of this Article applies to any state which during the second World War has been an enemy of any signatory of the present Charter.

Article 54

The Security Council shall at all times be kept fully informed of activities undertaken, or in contemplation, under regional arrangements or by regional agencies for the maintenance of international peace and security.

CHAPTER IX

International Economic and Social Cooperation

Article 55

With a view to the creation of conditions of stability and well-being which are necessary for peaceful and friendly relations among nations based on respect for the principle of equal rights and self-determination of peoples, the United Nations shall promote:

(a) Higher standards of living, full employment, and conditions of economic and social progress and development;

(b) Solutions of international economic, social, health, and related problems; and international cultural and educational cooperation; and

(c) Universal respect for, and observance of, human rights and fundamental freedoms for all without distinction as to race, sex, language, or religion.

Article 56

All members pledge themselves to take joint and separate action in cooperation with the organization for the achievement of the purposes set forth in Article 55.

Article 57

1. The various specialized agencies, established by inter-governmental agreement and having wide international responsibilities, as defined in their basic instruments in economic, social, cultural, educational, health and related fields, shall be brought into relationship with the United Nations in accordance with the provisions of Article 63.

2. Such agencies thus brought into relationship with the United Nations are

hereinafter referred to as specialized agencies.

Article 58

The organization shall make recommendations for the coordination of the policies and activities of the specialized agencies.

Article 59

The organization shall, where appropriate, initiate negotiations among the states concerned for the creation of any new specialized agencies required for the accomplishment of the purposes set forth in Article 55.

Article 60

Responsibility for the discharge of the functions of the organization set forth in this Chapter shall be vested in the General Assembly and, under the authority of the General Assembly, in the Economic and Social Council, which shall have for this purpose the powers set forth in Chapter X.

CHAPTER X

Economic and Social Council

Composition

Article 61

1. The Economic and Social Council shall consist of eighteen members of the United Nations elected by the General Assembly.

2. Subject to the provisions of Paragraph 3, six members of the Economic and Social Council shall be elected each year for a term of three years. A retiring member shall be eligible for immediate re-election.

3. At the first election, eighteen members of the Economic and Social Council shall be chosen. The term of office of six members so chosen shall expire at the end of one year, and of six other members at the end of two years, in accordance with arrangements made by the General Assembly.

4. Each member of the Economic and Social Council shall have one representative.

Functions and Powers

Article 62

1. The Economic and Social Council may make or initiate studies and reports with respect to international economic, social, cultural, educational, health, and related matters and may make recommendations with respect to any such matters to the General Assembly, to the members of the United Nations, and to the specialized agencies concerned.

2. It may make recommendations for the purpose of promoting respect for, and observance of, human rights and fundamental freedoms for all.

3. It may prepare draft conventions for submission to the General Assembly, with respect to matters falling within its competence.

4. It may call, in accordance with the rules prescribed by the United Nations, international conferences on matters falling within its competence.

Article 63

1. The Economic and Social Council may enter into agreements with any of the agencies referred to in Article 57, defining the terms on which the agency concerned shall be brought into relationship with the United Nations. Such agreements shall be subject to approval by the General Assembly.

2. It may coordinate the activities of the specialized agencies through consultation with and recommendations to such agencies and through recommendations to the General Assembly and to the members of the United Nations.

Article 64

1. The Economic and Social Council may take appropriate steps to obtain regular reports from the specialized agencies. It may make arrangements with the members of the United Nations and with the specialized agencies to obtain reports on the steps taken to give effect to its own recommendations and to recommendations on matters falling within its competence made by the General Assembly.

2. It may communicate its observations on these reports to the General Assembly.

Article 65

The Economic and Social Council may furnish information to the Security Council and shall assist the Security Council upon its request.

Article 66

1. The Economic and Social Council shall perform such functions as fall within its competence in connection with the carrying out of the recommendations of the General Assembly.

2. It may, with the approval of the General Assembly, perform services at the request of members of the United Nations and at the request of the specialized agencies.

3. It shall perform such other functions as are specified elsewhere in the present Charter or as may be assigned to it by the General Assembly.

Voting

Article 67

1. Each member of the Economic and Social Council shall have one vote.

2. Decisions of the Economic and Social Council shall be made by a majority of the members present and voting.

Procedure

Article 68

The Economic and Social Council shall set up commissions in economic and social fields and for the promotion of human rights, and such other commissions as may be required for the performance of its functions.

Article 69

The Economic and Social Council shall invite any member of the United Nations to participate, without vote, in its deliberations on any matter of particular concern to that member.

Article 70

The Economic and Social Council may make arrangements for representatives of the specialized agencies to participate, without vote, in its deliberations and in those of the commissions established by it, and for its representatives to participate in the deliberations of the specialized agencies.

Article 71

The Economic and Social Council may make suitable arrangements for consultation with non-governmental organizations which are concerned with matters within its competence. Such arrangements may be made with international organizations, and, where appropriate, with national organizations after consultation with the member of the United Nations concerned.

Article 72

1. The Economic and Social Council shall adopt its own rules of procedure, including the method of selecting its president.

2. The Economic and Social Council shall meet as required in accordance with its rules, which shall include provision for the convening of meetings on the request of a majority of its members.

CHAPTER XI

Declaration Regarding Non-Self-Governing Territories

Article 73

Members of the United Nations which have or assume responsibilities for the administration of territories whose peoples have not yet attained a full measure of self-government recognize the principle that the interests of the inhabitants of these territories are paramount, and ac-

cept as a sacred trust the obligation to promote to the utmost, within the system of international peace and security established by the present Charter, the well-being of the inhabitants of these territories, and, to this end:

(a) To insure, with due respect for the culture of the peoples concerned, their political, economic, social, and educational advancement, their just treatment, and their protection against abuses;

(b) To develop self-government, to take due account of the political aspirations of the peoples, and to assist them in the progressive development of their free political institutions, according to the particular circumstances of each territory and its peoples and their varying stages of advancement;

(c) To further international peace and security;

(d) To promote constructive measures of development, to encourage research, and to cooperate with one another and, when and where appropriate, with specialized international bodies with a view to the practical achievement of the social, economic and scientific purposes set forth in this Article; and

(e) To transmit regularly to the Secretary-General for information purposes, subject to such limitation as security and constitutional considerations may require, statistical and other information of a technical nature relating to economic, social, and educational conditions in the territories for which they are respectively responsible other than those territories to which Chapters XII and XIII apply.

Article 74

Members of the United Nations also agree that their policy in respect of the territories to which this Chapter applies, no less than in respect of their metropolitan areas, must be based on the general principle of good-neighborliness, due account being taken of the interests and well-being of the rest of the world in social, economic and commercial matters.

CHAPTER XII

International Trusteeship System

Article 75

The United Nations shall establish under its authority an international trusteeship system for the administration and supervision of such territories as may be placed thereunder by subsequent individual agreements. These territories are hereinafter referred to as trust territories.

Article 76

The basic objectives of the trusteeship system in accordance with the purposes

of the United Nations laid down in Article 1 of the present Charter, shall be:

(a) To further international peace and security;

(b) To promote the political, economic, social and educational advancement of the inhabitants of the trust territories, and their progressive development toward self-government or independence as may be appropriate to the particular circumstances of each territory and its peoples and the freely expressed wishes of the peoples concerned, and as may be provided by the terms of each trusteeship agreement;

(c) To encourage respect for human rights and for fundamental freedoms for all without distinction as to race, sex, language or religion, and to encourage recognition of the interdependence of the peoples of the world; and

(d) To insure equal treatment in social, economic and commercial matters for all members of the United Nations and their nationals, and also equal treatment for the latter in the administration of justice, without prejudice to the attainment of the foregoing objectives, and subject to the provisions of Article 80.

Article 77

1. The trusteeship system shall apply to such territories in the following categories as may be placed thereunder by means of trusteeship agreements:

(a) Territories now held under mandate;

(b) Territories which may be detached from enemy states as a result of the second World War; and

(c) Territories voluntarily placed under the system by states responsible for their administration.

2. It will be a matter for subsequent agreement as to which territories in the foregoing categories will be brought under the trusteeship system and upon what terms.

Article 78

The trusteeship system shall not apply to territories which have become members of the United Nations, relationship among which shall be based on respect for the principle of sovereign equality.

Article 79

The terms of trusteeship for each territory to be placed under the trusteeship system, including any alteration or amendment, shall be agreed upon by the states directly concerned, including the mandatory power in the case of territories held under mandate by a member of the United Nations, and shall be approved as provided for in Articles 83 and 85.

Article 80

1. Except as may be agreed upon in individual trusteeship agreements, made under Articles 77, 79 and 81, placing each territory under the trusteeship system, and until such agreements have been concluded, nothing in this Chapter shall be construed in or of itself to alter in any manner the rights whatsoever of any states or any peoples or the terms of existing international instruments to which members of the United Nations may respectively be parties.

2. Paragraph 1 of this Article shall not be interpreted as giving grounds for delay or postponement of the negotiation and conclusion of agreements for placing mandated and other territories under the trusteeship system as provided for in Article 77.

Article 81

The trusteeship agreement shall in each case include the terms under which the trust territory will be administered and designate the authority which will exercise the administration of the trust territory. Such authority, hereinafter called the administering authority, may be one or more states or the organization itself.

Article 82

There may be designated, in any trusteeship agreement, a strategic area or areas which may include part or all of the trust territory to which the agreement applies, without prejudice to any special agreement or agreements made under Article 43.

Article 83

1. All functions of the United Nations relating to strategic areas, including the approval of the terms of the trusteeship agreements and of their alteration or amendment, shall be exercised by the Security Council.

2. The basic objectives set forth in Article 76 shall be applicable to the people of each strategic area.

3. The Security Council shall, subject to the provisions of the trusteeship agreements and without prejudice to security considerations, avail itself of the assistance of the Trusteeship Council to perform those functions of the United Nations under the trusteeship system relating to political, economic, social and educational matters in the strategic areas.

Article 84

It shall be the duty of the administering authority to insure that the trust territory shall play its part in the maintenance of international peace and security. To this end the administering authority may make use of volunteer forces, facili-

ties, and assistance from the trust territory in carrying out the obligations toward the Security Council undertaken in this regard by the administering authority, as well as for local defense and the maintenance of law and order within the trust territory.

Article 85

1. The functions of the United Nations with regard to trusteeship agreements for all areas not designated as strategic, including the approval of the terms of the trusteeship agreements and of their alteration or amendment, shall be exercised by the General Assembly.

2. The Trusteeship Council, operating under the authority of the General Assembly, shall assist the General Assembly in carrying out these functions.

CHAPTER XIII

The Trusteeship Council

Composition

Article 86

1. The Trusteeship Council shall consist of the following members of the United Nations:

(a) Those members administering trust territories;

(b) Such of those members mentioned by name in Article 23 as are not administering trust territories; and

(c) As many other members elected for three-year terms by the General Assembly as may be necessary to insure that the total number of members of the Trusteeship Council is equally divided between those members of the United Nations which administer trust territories and those which do not.

2. Each member of the Trusteeship Council shall designate one specially qualified person to represent it therein.

Functions and Powers

Article 87

The General Assembly and, under its authority, the Trusteeship Council, in carrying out their functions, may:

(a) Consider reports submitted by the administering authority;

(b) Accept petitions and examine them in consultation with the administering authority;

(c) Provide for periodic visits to the respective trust territories at times agreed upon with the administering authority; and

(d) Take these and other actions in conformity with the terms of the trusteeship agreements.

Article 88

The Trusteeship Council shall formulate a questionnaire on the political, economic, social and educational advancement of the inhabitants of each trust territory, and the administering authority for each trust territory within the competence of the General Assembly shall make an annual report to the General Assembly upon the basis of such questionnaire.

Voting

Article 89

1. Each member of the Trusteeship Council shall have one vote.

2. Decisions of the Trusteeship Council shall be made by a majority of the members present and voting.

Procedure

Article 90

1. The Trusteeship Council shall adopt its own rules of procedure, including the method of selecting its president.

2. The Trusteeship Council shall meet as required in accordance with its rules, which shall include provision for the convening of meetings on the request of a majority of its members.

Article 91

The Trusteeship Council shall, when appropriate, avail itself of the assistance of the Economic and Social Council and of the specialized agencies in regard to matters with which they are respectively concerned.

CHAPTER XIV

The International Court of Justice

Article 92

The International Court of Justice shall be the principal judicial organ of the United Nations. It shall function in accordance with the annexed statute, which is based upon the statute of the Permanent Court of International Justice and forms an integral part of the present Chapter.

Article 93

1. All members of the United Nations are ipso facto parties to the statute of the International Court of Justice.

2. A state which is not a member of the United Nations may become a party to the statute of the International Court of Justice on conditions to be determined in each case by the General Assembly upon the recommendation of the Security Council.

Article 94

1. Each member of the United Nations undertakes to comply with the decision of

the International Court of Justice in any case to which it is a party.

2. If any party to a case fails to perform the obligations incumbent upon it under a judgment rendered by the Court, the other party may have recourse to the Security Council, which may, if it deems necessary, make recommendations or decide upon measures to be taken to give effect to the judgment.

Article 95

Nothing in the present Charter shall prevent members of the United Nations from entrusting the solution of their differences to other tribunals by virtue of agreements already in existence or which may be concluded in the future.

Article 96

1. The General Assembly or the Security Council may request the International Court of Justice to give an advisory opinion on any legal question.

2. Other organs of the United Nations and specialized agencies which may at any time be so authorized by the General Assembly, may also request advisory opinions of the Court on legal questions arising within the scope of their activities.

CHAPTER XV

The Secretariat

Article 97

The Secretariat shall comprise a Secretary General and such staff as the organization may require. The Secretary General shall be appointed by the General Assembly upon the recommendation of the Security Council. He shall be the chief administrative officer of the organization.

Article 98

The Secretary General shall act in that capacity in all meetings of the General Assembly, of the Security Council, of the Economic and Social Council and of the Trusteeship Council, and shall perform such other functions as are entrusted to him by these organs. The Secretary General shall make an annual report to the General Assembly on the work of the organization.

Article 99

The Secretary General may bring to the attention of the Security Council any matter which in his opinion may threaten the maintenance of international peace and security.

Article 100

1. In the performance of their duties the Secretary General and the staff shall not seek or receive instructions from any government or from any other authority external to the organization. They shall

refrain from any action which might reflect on their position as international officials responsible only to the organization.

2. Each member of the United Nations undertakes to respect the exclusively international character of the responsibilities of the Secretary General and the staff, and not to seek to influence them in the discharge of their responsibilities.

Article 101

1. The staff shall be appointed by the Secretary General under regulations established by the General Assembly.

2. Appropriate staffs shall be permanently assigned to the Economic and Social Council, the Trusteeship Council, and, as required, to other organs of the United Nations. These staffs shall form a part of the Secretariat.

3. The paramount consideration in the employment of the staff and in the determination of the conditions of service shall be the necessity of securing the highest standards of efficiency, competence and integrity. Due regard shall be paid to the importance of recruiting the staff on as wide a geographical basis as possible.

CHAPTER XVI

Miscellaneous Provisions

Article 102

1. Every treaty and every international agreement entered into by any member of the United Nations after the present Charter comes into force shall as soon as possible be registered with the Secretariat and published by it.

2. No party to any such treaty or international agreement which has not been registered in accordance with the provisions of Paragraph 1 of this Article may invoke that treaty or agreement before any organ of the United Nations.

Article 103

In the event of a conflict between the obligations of the members of the United Nations under the present Charter and their obligations under any other international agreement, their obligations under the present Charter shall prevail.

Article 104

The organization shall enjoy in the territory of each of its members such legal capacity as may be necessary for the exercise of its functions and the fulfillment of its purposes.

Article 105

1. The organization shall enjoy in the territory of each of its members such privileges and immunities as are necessary for the fulfillment of its purposes.

2. Representatives of the members of the United Nations and officials of the organization shall similarly enjoy such privileges and immunities as are necessary for the independent exercise of their functions in connection with the organization.

3. The General Assembly may make recommendations with a view to determining the details of the application of Paragraphs 1 and 2 of this Article or may propose conventions to the members of the United Nations for this purpose.

CHAPTER XVII

Transitional Security Arrangements

Article 106

Pending the coming into force of such special agreements referred to in Article 43, as in the opinion of the Security Council enable it to begin the exercise of its responsibilities under Article 42, the parties to the Four-Nation Declaration, signed at Moscow, Oct. 30, 1943, and France, shall, in accordance with the provisions of Paragraph 5 of that Declaration, consult with one another and, as occasion requires, with other members of the United Nations with a view to such joint action on behalf of the organization as may be necessary for the purpose of maintaining international peace and security.

Article 107

Nothing in the present Charter shall invalidate or preclude action in relation to any state which during the second World War has been an enemy of any signatory to the present Charter, taken or authorized as a result of that war by the governments having responsibility for such action.

CHAPTER XVIII

Amendments

Article 108

Amendments to the present Charter shall come into force for all members of the United Nations when they have been adopted by a vote of two-thirds of the members of the General Assembly and ratified in accordance with their respective constitutional processes by two-thirds of the members of the United Nations, including all the permanent members of the Security Council.

Article 109

1. A general conference of the members of the United Nations for the purpose of reviewing the present Charter may be held at a date and place to be fixed by a two-thirds vote of the members of the General Assembly and by a vote of any seven members of the Security Council. Each member of the United Nations shall have one vote in the conference.

2. Any alteration of the present Charter recommended by a two-thirds vote of the conference shall take effect when ratified in accordance with their respective constitutional processes by two-thirds of the members of the United Nations including all the permanent members of the Security Council.

3. If such a conference has not been held before the tenth annual session of the General Assembly following the coming into force of the present Charter, the proposal to call such a conference shall be placed on the agenda of that session of the General Assembly, and the conference shall be held if so decided by a majority vote of the members of the General Assembly and by a vote of any seven members of the Security Council.

CHAPTER XIX

Ratification and Signature

Article 110

1. The present Charter shall be ratified by the signatory states in accordance with their respective constitutional processes.

2. The ratifications shall be deposited with the Government of the United States of America, which shall notify all the signatory states of each deposit as well as the Secretary General of the organization when he has been appointed.

3. The present Charter shall come into force upon the deposit of ratifications by the Republic of China, France, the Union of Soviet Socialist Republics, the United Kingdom of Great Britain and Northern Ireland, and the United States of America, and by a majority of the other signatory states. A protocol of the ratifications deposited shall thereupon be drawn up by the Government of the United States of America which shall communicate copies thereof to all the signatory states.

4. The states signatory to the present Charter which ratify it after it has come into force will become original members of the United Nations on the date of the deposit of their respective ratifications.

Article 111

The present Charter, of which the Chinese, French, Russian, English and Spanish texts are equally authentic, shall remain deposited in the archives of the Government of the United States of America. Duly certified copies thereof shall be transmitted by that Government to the Governments of the other signatory states.

In faith whereof the representatives of the Governments of the United Nations have signed the present Charter.

Done at the city of San Francisco the twenty-sixth day of June, one thousand nine hundred and forty-five.

The Potsdam Declaration

Text of the declaration issued at Potsdam, Germany, July 26, 1945, outlining the terms under which Japan would be allowed to surrender:

1. We, the President of the United States, the President of the national government of the Republic of China and the Prime Minister of Great Britain, representing the hundreds of millions of our countrymen, have conferred and agreed that Japan shall be given the opportunity to end this war.

2. The prodigious land, sea, and air forces of the United States, the British Empire and China, many times reinforced by their armies and air fleets from the west, are poised to strike the final blow at Japan. This military power is sustained and inspired by the determination of all allied nations to prosecute the war against Japan until she ceases to resist.

3. The result of the futile and senseless German resistance to the might of the aroused free peoples of the world stands forth in awful clarity as an example to the people of Japan.

The might that now converges on Japan is immeasurably greater than that which, when applied to the resisting Nazis, necessarily laid waste to the land, the industry, and the method of life of the whole German people.

The full application of our military power, backed by our resolve, will mean the inevitable and complete destruction of the Japanese armed forces and just as inevitably the utter devastation of the Japanese homeland.

4. The time has come for Japan to decide whether she will continue to be controlled by these self-willed militaristic advisers whose unintelligent calculations have brought the empire of Japan to the threshold of annihilation, or whether she will follow the path of reason.

5. The following are our terms: we will not deviate from them; there are no alternatives; we shall brook no delay.

6. There must be eliminated for all time the authority and influence of those who have deceived and misled the people of Japan into embarking on world conquest, for we insist that a new order of peace, security, and justice will be impossible until irresponsible militarism is driven from the world.

7. Until such a new order is established

and until there is convincing proof that Japan's war-making power is destroyed, points in Japanese territory to be designated by the Allies shall be occupied to secure the achievement of the basic objectives we are here setting forth.

8. The terms of the Cairo declaration shall be carried out and Japanese sovereignty shall be limited to the Islands of Honshu, Hokkaido, Kyushu, Shikoku and such minor islands as we determine.

9. Japanese military forces after being completely disarmed shall be permitted to return to their homes with the opportunity to lead peaceful and productive lives.

10. We do not intend that the Japanese shall be enslaved as a race or destroyed as a nation, but stern justice shall be meted out to all war criminals, including those who have visited cruelties upon our prisoners.

The Japanese government shall remove all obstacles to the revival and strengthening of democratic tendencies among the Japanese people. Freedom of speech and religion and of thought, as well as respect for the fundamental human rights, shall be established.

11. Japan shall be permitted to maintain such industries as will sustain her economy and permit the payment of just reparation in kind, but not those industries which will enable her to rearm for war.

To this end, access to, as distinguished from control of, raw materials shall be permitted. Eventual Japanese participation in world trade relations shall be permitted.

12. The occupying forces of the Allies shall be withdrawn from Japan as soon as these objectives have been accomplished and there has been established in accordance with the freely expressed will of the Japanese people a peacefully inclined and responsible government.

13. We call upon the government of Japan to proclaim now the unconditional surrender of all Japanese armed forces, and to provide proper and adequate assurances of their good faith in such action. The alternative for Japan is prompt and utter destruction.

Japan's Surrender

Text of Japanese surrender document signed aboard the U. S. S. *Missouri* in Tokyo Bay, September 2, 1945, Tokyo time (September 1, New York Time).

1. We, acting by command of and in behalf of the Emperor of Japan, the Japanese government and the Japanese im-

perial general headquarters, hereby accept provisions in the declaration issued by the heads of the governments of the United

States, China, and Great Britain July 26, 1945, at Potsdam, and subsequently adhered to by the Union of Soviet Socialist Republics, which four powers are hereafter referred to as the Allied Powers.

2. We hereby proclaim the unconditional surrender to the Allied Powers of the Japanese imperial general headquarters and of all Japanese armed forces and all armed forces under Japanese control wherever situated.

3. We hereby command all Japanese forces, wherever situated, and the Japanese people to cease hostilities forthwith, to preserve and save from damage all ships, aircraft and military and civil property and to comply with all requirements which may be imposed by the Supreme Commander for the Allied Powers or by agencies of the Japanese government at his direction.

4. We hereby command the Japanese imperial general headquarters to issue at once orders to the commanders of all Japanese forces and all forces under Japanese control, wherever situated, to surrender unconditionally themselves and all forces under their control.

5. We hereby command all civil, military, and naval officials to obey and enforce all proclamations, orders and direc-

tives deemed by the Supreme Commander for the Allied Powers to be proper to effectuate this surrender and issued by him or under his authority and we direct all such officials to remain at their posts and to continue to perform their non-combat duties unless specially relieved by him or under his authority.

6. We hereby undertake for the Emperor, the Japanese government, and their successors to carry out the provisions of the Potsdam Declaration in good faith, and to issue whatever orders and take whatever action may be required by the Supreme Commander for the Allied Powers or by any other designated representative of the Allied Powers for the purpose of giving effect to that declaration.

7. We hereby command the Japanese imperial government and the Japanese imperial general headquarters at once to liberate all Allied prisoners of war and civilian internees now under Japanese control and to provide for their protection, care, maintenance, and immediate transportation to places as directed.

8. The authority of the Emperor and the Japanese government to rule the state shall be subject to the Supreme Commander for the Allied Powers who will take such steps as he deems proper to effectuate these terms of surrender.

The Surrender of Germany

Germany surrendered unconditionally to the Western Allies and the Soviet Union at a ceremony in a schoolhouse in Reims, France, at 2:41 A. M., French Time (8:41 P. M., E. W. T., May 6), May 7, 1945. This act brought the European war to a close, five years, eight months and six days after the Nazis started their invasions.

Following is the text of "An Act of Military Surrender."

"1. We, the undersigned, acting by authority of the German High Command, hereby surrender unconditionally to the Supreme Commander, Allied Expeditionary Force, and simultaneously to the Soviet High Command, all forces on land, sea, and in the air who are at this date under German control.

"2. The German High Command will at once issue orders to all German military, naval and air authorities and to all forces under German control to cease active operations at 2301 hours (11:01) Central European Time on Eight May and to remain in the positions occupied at the time. No ship, vessel or aircraft is to be scuttled, or any damage done to their hull, machinery, or equipment.

"3. The German High Command will at once issue to the appropriate commanders, and ensure the carrying out of any fur-

ther orders issued by the Supreme Commander, Allied Expeditionary Force, and by the Soviet High Command.

"4. This Act of Military Surrender is without prejudice to, and will be superseded by, any general instrument of surrender imposed, or on behalf of the United Nations and applicable to Germany and the German Armed Forces as a whole.

"In the event of the German High Command or any of the forces under their control failing to act in accordance with this Act of Surrender, the Supreme Commander, Allied Expeditionary Force, and the Soviet High Command will take such punitive or other action as they deem appropriate.

"Signed at Reims, France, at 0241 hours (2:41 A. M.), on the Seventh day of May, 1945.

"On behalf of the German High Command—Jodl.

"In the presence of:

"On behalf of the Supreme Commander, Allied Expeditionary Force—W. B. Smith.

"On behalf of the Soviet High Command—Ivan Susloparoff.

"On behalf of the French—F. Sevez."

The surrender terms were ratified in Berlin on May 8, 1945, and the war officially ended at 12:01 A. M., May 9, 1945.

The Fourteen Points

(The Fourteen Points were given to Congress by President Wilson, on Jan. 8, 1918, as the "only possible" peace program. On Nov. 5, 1918, the Points were accepted by the Allies, with reservations on Point II, as the basis for peace terms with Germany, but many of Wilson's recommendations were defeated or compromised in the Treaty of Versailles.)

I. Open covenants of peace, openly arrived at, after which there shall be no private international understandings of any kind but diplomacy shall proceed always frankly and in the public view.

II. Absolute freedom of navigation upon the seas, outside territorial waters, alike in peace and in war, except as the seas may be closed in whole or in part by international action for the enforcement of international covenants.

III. The removal, so far as possible, of all economic barriers and the establishment of an equality of trade conditions among all the nations consenting to the peace and associating themselves for its maintenance.

IV. Adequate guarantees given and taken that national armaments will be reduced to the lowest point consistent with domestic safety.

V. A free, open-minded, and absolutely impartial adjustment of all colonial claims, based upon a strict observance of the principle that in determining all such questions of sovereignty the interests of the populations concerned must have equal weight with the equitable claims of the government whose title is to be determined.

VI. The evacuation of all Russian territory and such a settlement of all questions affecting Russia as will secure the best and freest cooperation of the other nations of the world in obtaining for her an unhampered and unembarrassed opportunity for the independent determination of her own political development and national policy and assure her of a sincere welcome into the society of free nations under institutions of her own choosing; and, more than a welcome, assistance also of every kind that she may need and may herself desire. The treatment accorded Russia by her sister nations in the months to come will be the acid test of their good will, of their comprehension of her needs as distinguished from their own interests, and of their intelligent and unselfish sympathy.

VII. Belgium, the whole world will agree, must be evacuated and restored, without any attempt to limit the sovereignty which she enjoys in common with all other free nations. No other single act will serve as this will serve to restore confidence among the nations in the laws which they have themselves set and determined for the government

of their relations with one another. Without this healing act the whole structure and validity of international law is forever impaired.

VIII. All French territory should be freed and the invaded portions restored, and the wrong done to France by Prussia in 1871 in the matter of Alsace-Lorraine, which has unsettled the peace of the world for nearly fifty years, should be righted, in order that peace may once more be made secure in the interest of all.

IX. A readjustment of the frontiers of Italy should be effected along clearly recognizable lines of nationality.

X. The peoples of Austria-Hungary, whose place among the nations we wish to see safeguarded and assured, should be accorded the freest opportunity of autonomous development.

XI. Rumania, Serbia, and Montenegro should be evacuated; occupied territories restored; Serbia accorded free and secure access to the sea; and the relations of the several Balkan states to one another determined by friendly counsel along historically established lines of allegiance and nationality; and international guarantees of the political and economic independence and territorial integrity of the several Balkan states should be entered into.

XII. The Turkish portions of the present Ottoman Empire should be assured a secure sovereignty, but the other nationalities which are now under Turkish rule should be assured an undoubted security of life and an absolutely unmolested opportunity of autonomous development, and the Dardanelles should be permanently opened as a free passage to the ships and commerce of all nations under international guarantees.

XIII. An independent Polish state should be erected which should include the territories inhabited by indisputably Polish populations, which should be assured a free and secure access to the sea, and whose political and economic independence and territorial integrity should be guaranteed by international covenant.

XIV. A general association of nations must be formed under specific covenants for the purpose of affording mutual guarantees of political independence and territorial integrity to great and small states alike.

The Four Freedoms

(The following quotation is from President Roosevelt's annual message to Congress on Jan. 6, 1941.)

"In the future days, which we seek to make secure, we look forward to a world founded upon four essential human freedoms.

"The first is freedom of speech and expression—everywhere in the world.

"The second is freedom of every person to worship God in his own way—everywhere in the world.

"The third is freedom from want—which, translated into world terms, means economic understandings which will secure to every nation a healthy peace time life for its inhabitants—everywhere in the world.

"The fourth is freedom from fear—which, translated into world terms, means a worldwide reduction of armaments to such a point and in such a thorough fashion that no nation will be in a position to commit an act of physical aggression against any neighbor—anywhere in the world.

"That is no vision of a distant millennium. It is a definite basis for a kind of world attainable in our own time and generation. That kind of world is the very antithesis of the so-called new order of

tyranny which the dictators seek to create with the crash of a bomb.

"To that new order we oppose the greater conception—the moral order. A good society is able to face schemes of world domination and foreign revolutions alike without fear.

"Since the beginning of our American history we have been engaged in change—in a perpetual peaceful revolution—a revolution which goes on steadily, quietly adjusting itself to changing conditions—without the concentration camp or the quick-lime in the ditch. The world order which we seek is the cooperation of free countries, working together in a friendly, civilized society.

"This nation has placed its destiny in the hands and heads and hearts of its millions of free men and women; and its faith in freedom under the guidance of God. Freedom means the supremacy of human rights everywhere. Our support goes to those who struggle to gain those rights or keep them. Our strength is in our unity of purpose.

"To that high concept there can be no end save victory."

The Atlantic Charter

(In a dramatic meeting off Newfoundland, August 9-10, 1941, President Roosevelt and Winston Churchill formulated this statement of common war aims, which was issued August 14.)

The President of the United States of America and the Prime Minister, Mr. Churchill, representing His Majesty's Government in the United Kingdom, being met together, deem it right to make known certain common principles in the national policies of their respective countries on which they base their hopes for a better future for the world.

FIRST, their countries seek no aggrandizement, territorial or other;

SECOND, they desire to see no territorial changes that do not accord with the freely expressed wishes of the peoples concerned;

THIRD, they respect the right of all peoples to choose the form of government under which they will live; and they wish to see sovereign rights and self government restored to those who have been forcibly deprived of them;

FOURTH, they will endeavor, with due respect for their existing obligations, to further the enjoyment by all States, great or small, victor or vanquished, of access, on equal terms, to the trade and to the raw materials of the world which are needed for their economic prosperity;

FIFTH, they desire to bring about the fullest collaboration between all nations in the economic field with the object of securing, for all, improved labor standards, economic advancement and social security;

SIXTH, after the final destruction of Nazi tyranny, they hope to see established a peace which will afford to all nations the means of dwelling in safety within their own boundaries, and which will afford assurance that all men in all lands may live out their lives in freedom from fear and want;

SEVENTH, such a peace should enable all men to traverse the high seas and oceans without hindrance;

EIGHTH, they believe that all the nations of the world, for realistic as well as spiritual reasons, must come to the abandonment of the use of force. Since no future peace can be maintained if land, sea or air armaments continue to be employed by nations which threaten, or may threaten, aggression outside of their frontiers, they believe, pending the establishment of a wider and permanent system of general security, that the disarmament of such nations is essential. They will likewise aid and encourage all other practicable measures which will lighten for peace-loving peoples the crushing burden of armaments.

EUROPEAN INITIATIVE AND ECONOMIC RECOVERY

by **GEORGE C. MARSHALL**

NOTE: This speech, delivered by the Secretary of State during the Commencement exercises at Harvard University, Cambridge, Mass., on June 5, 1947, has since been popularly referred to as the "Marshall Plan." For further ERP information see pages 345-6.

I NEED NOT TELL YOU gentlemen that the world situation is very serious. That must be apparent to all intelligent people. I think one difficulty is that the problem is one of such enormous complexity that the very mass of facts presented to the public by press and radio make it exceedingly difficult for the man in the street to reach a clear appraisal of the situation. Furthermore, the people of this country are distant from the troubled areas of the earth and it is hard for them to comprehend the plight and consequent reactions of the long-suffering peoples, and the effect of those reactions on their governments in connection with our efforts to promote peace in the world.

In considering the requirements for the rehabilitation of Europe, the physical loss of life, the visible destruction of cities, factories, mines, and railroads was correctly estimated, but it has become obvious during recent months that this visible destruction was probably less serious than the dislocation of the entire fabric of European economy. For the past 10 years conditions have been highly abnormal. The feverish preparation for war and the more feverish maintenance of the war effort engulfed all aspects of national economies. Machinery has fallen into disrepair or is entirely obsolete. Under the arbitrary and destructive Nazi rule, virtually every possible enterprise was geared into the German war machine. Longstanding commercial ties, private institutions, banks, insurance companies, and shipping companies disappeared, through loss of capital, absorption through nationalization, or by simple destruction. In many countries, confidence in the local currency has been severely shaken. The breakdown of the business structure of Europe during the war was complete. Recovery has been seriously retarded by the fact that two years after the close of hostilities a peace settlement with Germany and Austria has not been agreed upon. But even given a more prompt solution of these difficult problems, the rehabilitation of the economic structure of Europe quite evidently will require a much longer time and greater effort than had been foreseen.

There is a phase of this matter which is both interesting and serious. The farmer has always produced the foodstuffs to exchange with the city dweller for the other necessities of life. This division of labor is the basis of modern civilization. At the present time it is threatened with breakdown. The town and city industries are not producing adequate goods to exchange with the food-producing farmer. Raw materials and fuel are in short supply. Machinery is lacking or worn out. The farmer or the peasant cannot find the goods for sale which he desires to purchase. So the sale of his farm produce for money which he cannot use seems to him an unprofitable transaction. He, therefore, has withdrawn many fields from crop cultivation and is using them for grazing. He feeds more grain to stock and finds for himself and his family an ample supply of food, however short he may be on clothing and the other ordinary gadgets of civilization. Meanwhile people in the cities are short of food and fuel. So the governments are forced to use their foreign money and credits to procure these necessities abroad. This process exhausts funds which are urgently needed for reconstruction. Thus a very serious situation is rapidly developing which bodes no good for the world. The modern system of the division of labor upon which the exchange of products is based is in danger of breaking down.

The truth of the matter is that Europe's requirements for the next three or four years of foreign food and other essential products—principally from America—are so much greater than her present ability to pay that she must have substantial additional help or face economic, social, and political deterioration of a very grave character.

The remedy lies in breaking the vicious circle and restoring the confidence of the European people in the economic future of their own countries and of Europe as a

whole. The manufacturer and the farmer throughout wide areas must be able and willing to exchange their products for currencies the continuing value of which is not open to question.

Aside from the demoralizing effect on the world at large and the possibilities of disturbances arising as a result of the desperation of the people concerned, the consequences to the economy of the United States should be apparent to all. It is logical that the United States should do whatever it is able to do to assist in the return of normal economic health in the world, without which there can be no political stability and no assured peace. Our policy is directed not against any country or doctrine but against hunger, poverty, desperation, and chaos. Its purpose should be the revival of a working economy in the world so as to permit the emergence of political and social conditions in which free institutions can exist. Such assistance, I am convinced, must not be on a piece-meal basis as various crises develop. Any assistance that this government may render in the future should provide a cure rather than a mere palliative. Any government that is willing to assist in the task of recovery will find full cooperation, I am sure, on the part of the United States government. Any government which maneuvers to block the recovery of other countries cannot expect help from us. Furthermore, governments, political parties, or groups which seek to perpetuate human misery in order to profit therefrom politically or otherwise will encounter the opposition of the United States.

It is already evident that, before the United States government can proceed much further in its efforts to alleviate the situation and help start the European world on its way to recovery, there must be some agreement among the countries of Europe as to the requirements of the situation and the part those countries themselves will take in order to give proper effect to whatever action might be undertaken by this government. It would be neither fitting nor efficacious for this government to undertake to draw up unilaterally a program designed to place Europe on its feet economically. This is the business of the Europeans. The initiative, I think, must come from Europe. The role of this country should consist of friendly aid in the drafting of a European program and of later support of such a program so far as it may be practical for us to do so. The program should be a joint one, agreed to by a number, if not all, of European nations.

An essential part of any successful action on the part of the United States is an understanding on the part of the people of America or the character of the problem and the remedies to be applied. Political passion and prejudice should have no part. With foresight, and a willingness on the part of our people to face up to the vast responsibility which history has clearly placed upon our country, the difficulties I have outlined can and will be overcome.

Definitions

COLONY: a company of people, purposely or otherwise, transplanted from their mother country and remaining subject to the jurisdiction of the parent state.

CROWN COLONY: a British Empire colony in which the crown retains some kind of control over legislation.

DOMINION: an autonomous community within the British Empire, equal in status to any other dominion, but united by a common allegiance to the crown.

PROTECTORATE: an area which is protected by a superior authority from domestic or foreign disturbance or dictation and shares in its own government.

MANDATE: order or commission granted by League of Nations (before its defunction) as mandator to a member nation.

SPHERE OF INFLUENCE: a territory within which the political influence or the interests of one nation are permitted by other nations to be more or less exclusive. Also loosely used to denote regions more or less under the control of a nation but not constituting a formally recognized protectorate or suzerainty.

SUZERAIN: a state that exercises political control over another state in relation to which it is sovereign.

TRUSTESHIP: administration by a member of the United Nations of an area not yet ready for self-government.

THE OTHER NATIONS OF THE WORLD



A GUIDE TO MAIN HISTORICAL, POLITICAL, ECONOMIC,
GEOGRAPHIC AND SOCIAL FACTS

Prepared by the Staff of ENCYCLOPAEDIA BRITANNICA

Under the direction of
WALTER YUST, Editor-in-chief

Afghanistan (Kingdom)

Area: approx. 270,000 square miles.

Population (est. 1946): 12,000,000 (approx. 35% Afghan, 21% Tadchik, 8.5% Mongolian, 35.5% others).

Density per square mile: 44.

Ruler: Mohammed Zaher Shah.

Prime Minister: Sardar Shah Mahmud.

Principal cities (est.): Kabul, 206,000 (capital); Kandahar, 77,000 (trading center); Herat, 76,000 (farming center).

Monetary unit: Afghani.

Languages: Pushtu (official), Persian.

Religion: Mohammedan (Sunni, 90%; Shiah, 10%).

HISTORY. Wedged between Pakistan, Iran and the U.S.S.R. in southwestern Asia without outlet to the sea, Afghanistan did not become an independent state until 1747. Previously, it had been either a cluster of small states under nominal Arab rule, part of Mongol or Mogul empires, or dismembered among India, Persia and the Uzbeks.

By the 19th century Afghanistan had passed into the British sphere of influence, though the British had to dispatch troops more than once to enforce Afghan friendliness. In 1880 the British recognized Abdur Rahman Khan as Emir and gave him an annual subsidy of more than \$500,000 to delegate management of his foreign relations to Britain. His son, Habibullah, succeeded him in 1901 and kept Afghanistan neutral in World War I despite strong pressure of pro-Turkish elements.

On Aug. 8, 1919, a treaty was signed making Afghanistan free and independent of all British control. The country maintained strict neutrality in World War II, and was admitted to the United Nations in Nov., 1946.

GOVERNMENT. Under the 1932 constitution, Afghanistan is a constitutional monarchy, with authority vested in the sover-

eign and parliament, which has a senate of forty-five members named for life by the sovereign and a national assembly of 109 elected members. Executive power is exercised by the sovereign and cabinet headed by the prime minister.

Military service is compulsory. The army strength is about 100,000, supplemented by tribal bands. There is a small air force.

SOCIAL AND ECONOMIC CONDITIONS. Education is nominally compulsory. Primary schools exist in many parts of the country, but secondary schools only in Kabul and provincial capitals. There were about 100,000 pupils in 369 schools in 1946.

Only a fifth of the soil is under cultivation, the greater part of the country being mountainous and rocky. Farming is confined to the fertile valleys and plains, sometimes with the aid of irrigation. Two crops a year are usually grown. Important ones include fruits and nuts, castor beans, cereals, madder, tobacco, cotton and vegetables. Wheat is the staple food. The fat-tailed indigenous sheep is the principal source of meat, wearing apparel and skins for export. Camels, humped cattle, oxen and asses are numerous.

Important manufactures include silk, felt, sheepskin coats, soap, carpets and boots. Factories have been erected by government monopolies to produce skins, sugar, textiles, vehicles, and power.

Among the leading exports are karakul skins (mostly to the U.S.), cotton, wool, rugs, carpets and dried fruits. Approximately 2,400,000 karakul skins were exported in 1945-46. Most of the trade is carried on through Pakistan, but cattle and foodstuffs are exported to the U.S.S.R. in return for cotton and wool. Exports through India in 1945-46 totaled approximately \$55,000,000.

Revenue and expenditure amount to about \$45,000,000 a year.

Afghanistan has no railways, navigable streams or air routes. Transport is generally by camel or pack horse. The principal trade routes lead south through the Khyber and Khojak Passes to Pakistan, and north to the Uzbek and Turkmen Soviet Socialist Republics. There are about 5,100 miles of roads suitable for motor transport.

Both mineral and forest resources are largely unexploited. There are deposits of coal, copper, gold, iron ore, oil and silver. Timber and gum resin are obtained.

NATURAL FEATURES; CLIMATE. Afghanistan, approximately the size of Texas, is split east to west by the Hindu Kush range of the Himalayas, rising in the east to heights of 24,000 feet. Except in the southwest, most of the country is covered by high snow-capped mountains and deep valleys. The few passes are deep and narrow. The Amu Darya (Oxus), Kabul and Helmand are the most important rivers, and there are hundreds of swift and un-navigable mountain streams. The climate ranges from extremes of below zero to more than 100° in the north; however, it is not so extreme in the south, although snowfall is heavy all over the country in winter. Rainfall, chiefly in the spring, is relatively light. The hottest weather occurs in summer and is particularly severe around Kandahar.

Albania (Republic)

(Shqipëria)

Area: 10,629 square miles.

Population (est. 1946): 1,120,522 (Albanian 99.8%; others, .2%).

Density per square mile: 105.4.

Head of the Government: Enver Hoxha.

Principal cities (last census, 1930): Tirana, 30,806 (capital); Scutari, 29,209 (northern trading center); Koritsa, 22,787 (farming center).

Monetary unit: Lek.

Language: Albanian.

Religions (est.): Moslem, 69%; Orthodox Christian, 21%; Roman Catholic, 10%.

HISTORY. A tiny, backward state approximately the size of Maryland, Albania has acquired considerable importance since World War II because of its close ties with the Soviet Union and its strategic location at the mouth of the Adriatic. After the fall of the Roman Empire, Albania became part of the Byzantine Empire and was successively invaded by Goths, Serbs and Bulgarians. From 1014 to 1204 it was again under Byzantine rule. An alliance of Albanian chieftains (1444-66) under Skanderbeg failed to halt the advance of the Turks, and the country remained under at least nominal Turkish rule for more than four centuries, until it proclaimed its independence on Nov. 28, 1912.

During World War I Albania was vari-ously occupied by Italian, Greek, French,

Serb and Austro-Bulgarian forces. On Aug. 2, 1920, Italy recognized Albanian independence and evacuated the country. Ahmed Zogu, premier in 1922-23, ousted the government of Mgr. Fan Noli in 1924 and became president of a newly constituted republic in 1925. Three years later, after concluding pacts which placed Albania in Italy's sphere of influence, Zogu proclaimed himself King Zog I.

In 1939, Italy occupied the country in a matter of days. During the Greco-Italian war of 1940-41, the Greek armies pushed the Italians back from the Albanian border and occupied a large part of southern Albania. When Germany attacked Greece and Yugoslavia in April, 1941, however, the Greeks withdrew quickly, and the Axis occupation of Albania was complete.

Albania was free of the Axis yoke by the end of 1944, and a leftist provisional government under Colonel General Enver Hoxha was established. That regime was confirmed in power by subsequent elections, and British, Soviet and U.S. recognition. Since then, Albania has collaborated closely with the Soviet Union and has quarreled frequently with Greece and the western powers. Two main sources of dispute with Greece were the latter's claim to the Albanian territory of Northern Epirus and its charge that Albania was arming anti-government Greek guerrillas. In April, 1948, Albania rejected an offer of the U.N. Balkan Commission to mediate this dispute over Albanian Epirus. When two British destroyers were sunk by mines in the Corfu channel in March, 1947, Britain lodged a sharp protest and referred its complaint to the U.N. Security Council. The Council's decision, favorable to Britain, was vetoed by the U.S.S.R., and Britain carried its case to the International Court of Justice, which ruled on March 26, 1948, that it had jurisdiction of the dispute and proceeded to hear the arguments of both sides.

GOVERNMENT. Elections of Dec. 2, 1945, for the constituent assembly officially gave 95 percent of the votes to a Democratic Front of various resistance elements including some Communists. On Jan. 11, 1946, the assembly proclaimed Albania a republic with Hoxha as head of government, commander in chief of the armed forces and defense minister. The army, unofficially estimated at 60,000 men, maintains close liaison with the Soviets.

Albania's sovereignty over Saseno, a small but strategic Adriatic island was confirmed by the Italian peace treaty of 1947.

SOCIAL AND ECONOMIC CONDITIONS. Primary education is nominally compulsory, but illiteracy is high, especially among women. There are no institutions of higher learning.

Albanians are called Ghegs and Tosks, according to whether they live north or

south of the Shkumbi River. They live in clans or tribes, in a feudal manner. Moslems predominate in most sections.

Albania is still a primitive country where each family tries to provide most of its own needs. Nearly the whole population is engaged in combined farming and stock-raising. Only a small portion of the central part is fit for tilling. Corn is the chief crop. Others are wheat, tobacco, oats, barley, rye, spelt, olives and citrus fruit. Only a few factories are engaged in processing Albania's food products.

Albania's postwar trade has been limited in volume, although it received shipments from UNRRA in 1946-47 totaling 183,000 tons. Leading exports are wool, hides, fur, dairy products and bitumen.

There are still no railroads (two were under construction in 1948), but good highways were developed by the Italians for strategic purposes, and the Russians continued such construction. The principal and only fully equipped port is Durazzo.

Mineral wealth, thought to be considerable, is relatively unexploited. The principal minerals are aluminum and petroleum, which were developed to some extent during the Italian occupation of 1939-44. There are also deposits of lignite, bitumen, asphalt, gypsum, copper and iron.

Forest resources include large stands of oak, walnut, chestnut and elm, and in the high regions, beech, pine and fir.

NATURAL FEATURES; CLIMATE. Albania is a mountainous state, largely over 3,000 ft. above sea level, with a narrow marshy coastal plain crossed by several rivers. A complex, often inaccessible mountainous hinterland encloses small fertile basins, and contains some wide valleys, of which the largest is that of Lake Ohrid in the southeast. The interior mountain plateaus and basins contain the centers of population. With the exception of the Bojana in the northwest, which is the outlet of Lake Scutari (135 sq. mi.) to the Adriatic, there are no navigable rivers.

The climate is typically Mediterranean, with dry, hot summers and moderate winters. Inland temperatures are lower than those on the coast. Winter frosts occur in the southern part of the country.

ARABIA

The Arabian peninsula, at the southwest extremity of Asia, is about four times the size of Texas. Its rich oil deposits and proximity to Palestine gave it special political importance in 1948. Once a political unit, today it consists of the kingdoms Saudi Arabia and Yemen, the British colony of Aden and six British protectorates.

The peninsula, with an area of about

923,000 square miles, and an extreme length of 1,400 miles, is generally a plateau sloping gently eastward from a mountain range that averages 5,000 feet in elevation and runs along its entire west side within ten or fifteen miles of the Red Sea. The range reaches a maximum of 12,336 feet in Yemen to the southwest. Arabia has no rivers and no forests and is principally a desert dotted with many oases.

Most of the peninsula, particularly the interior, has a hot desert climate with frequent changes in temperature. The highlands of the Yemen and southwestern Saudi Arabia, however, together with parts of Oman, have a temperate climate. Jidda, on the Red Sea, has an average daily high temperature of 93° during August.

Mohammed united all Arabs in the 7th century A.D., and his followers, led by the caliphs, founded a great empire with its capital at Medina. Later, the caliphate capital was transferred to Damascus and then Baghdad, but Arabia retained its importance because of the holy cities of Mecca and Medina. In the 16th and 17th centuries, the Turks established at least nominal rule over much of Arabia, and in the middle of the 18th century it was divided into separate principalities.

Through agreements with local rulers, the British extended their rule over the southern and eastern coasts in the 19th century. At the same time, the Wahhabs, a religious sect advocating strict adherence to Mohammed's teachings, gained control over most of central and eastern Arabia, and their work was the beginning of the present Saudi Arabia.

Political Divisions of Arabia

Name	Area (sq. mi.)	Population (est. 1938)
Aden colony (British)	80	86,309§
Aden protectorate*	112,000	600,000
Bahrein Islands		
(Sultanate)*	213	89,970†
Kuwait (Sheikdom)*	1,930	50,000
Oman and Masqat		
(Sultanate)*	82,000	500,000
Qatar (Sheikdom)*	‡	‡
Saudi Arabia		
(Kingdom)	609,841	5,250,000
Asir	13,857	750,000
Hejaz	182,192	1,500,000
Nejd	413,792	3,000,000
Trucial Coast (Sheikdoms)*	‡	‡
Yemen (Kingdom)	75,000	3,500,000

*British protectorate. †Census 1941. ‡No reliable data. §Census 1946.

Saudi Arabia (Kingdom)

The most important state of the peninsula is almost solely the creation of King Ibn Sa'ud. In 1901, at the age of twenty, he seized the emirate of Riyadh and soon set himself up as the leader of the Arab nationalist movement. During World War

He collaborated with the famous T. E. Lawrence in the successful "desert revolt" against Turkey. On the collapse of Turkey at the end of the war, he freed the whole peninsula from Turkish rule, and through a series of local military campaigns was able to proclaim himself King of Hejaz and Nejd and dependencies in 1927. His territories became the Kingdom of Saudi Arabia in 1932.

Hejaz and Nejd are still under separate administrations. In Nejd, whose capital is Riyadh, Ibn Sa'ud's rule is absolute. The eldest of his numerous sons, Prince Sa'ud, acts as viceroy in his absence. The constitution of Hejaz, whose capital is Mecca, provides for a cabinet of ministers headed by the King's second son, Prince Faisal, who likewise acts as viceroy in his father's absence. There is a consultative legislative assembly in Mecca and various municipal village and tribal councils whose members are named or approved by the King.

The majority of the inhabitants are Bedouin—nomads following their flocks over the desert. There are a few large towns—Mecca, birthplace of the Prophet (80,000), Medina, site of the tomb of the Prophet (30,000), Jidda, port of Mecca on the Red Sea (40,000), and Riyadh, capital of Nejd (30,000).

In Hejaz, Medina produces dates in the oases, and fruit and honey; otherwise, its products are such desert commodities as camels, horses, sheep, hides, charcoal and wool. The most important commercial activity outside of the oil industry is the annual influx of Moslem pilgrims to Mecca and Medina. The products of Nejd include dates, wheat, barley, hides, wool, fruits, butter, camels and livestock.

Oil is produced by an American-owned company whose principal field is at Dhahran near the Persian Gulf Coast. Production in 1945 skyrocketed to an estimated 19,943,000 barrels, over 40 times the 1938 figure; it increased further to 59,943,766 barrels in 1946 and 89,851,646 barrels in 1947. The company's expenditures and payroll constitute important invisible exports, and the royalties paid to the government have greatly strengthened the kingdom's financial condition. A pipeline from Dammam to Sidon, Lebanon, was under construction in 1948.

There are no railroads and few motorable roads. Camel transportation prevails. Air service is provided by TWA, BOAC and other international lines.

Kuwait (Sheikdom)

Kuwait, on the northwestern shore of the Persian Gulf, is an independent state ruled by Sheik Ahmed ibn Jabir al Subah. British protection, first exercised in 1898, has several times prevented it from being absorbed by Saudi Arabia. The territory surrounding Al Kuwait, its port, is largely

desert; its trade consists of exchanging Arab goods from the interior for textiles, rice, sugar and other necessities. Kuwait's petroleum reserves, estimated at 9 billion barrels, are under concession to the Kuwait Oil Co. Production in 1947: 16,227,906 bbl.

Oman and Masqat (Sultanate)

Occupying the mountainous southeastern part of the peninsula, Oman is nominally an independent state under the rule of Sultan Sayyid Sa'id Taimur. It has been under British protection since early in the 19th century. The state is best known for its date cultivation, and its riding camels are considered the best in the world. Trade is mainly to and from India. The capital, Masqat (population 4,200), commands the entrance to the Persian Gulf.

Qatar (Sheikdom)

Qatar occupies the whole of the Qatar peninsula in the Persian Gulf. It is ruled, under British protection, by Sheik Abdullah ibn Jasmil al Thani. The whole area is claimed by Saudi Arabia. Oil deposits have been found there.

Trucial Coast (Sheikdoms)

This area, extending along part of the Gulf of Oman and the southern coast of the Persian Gulf, is ruled by 7 semi-independent sheiks. Treaties signed with Britain in 1853 and 1892 provided that the sheiks should not cede or sell any part of their land to any other power.

Yemen (Kingdom)

Yemen is an independent state occupying the southwestern extremity of the peninsula. Its ruler is Self el-Islam Ahmad, who succeeded to the throne in March, 1948, after insurgents had murdered his aged father, King Yahya.

Its sovereign status was confirmed by the Treaty of Sana with Britain and India (Feb. 11, 1934) and the Treaty of Taif concluded with Saudi Arabia at the cessation of hostilities between the two states on May 13, 1934. The people are permanently settled and are for the most part engaged in agriculture, fishing and trade. Chief products are Mocha coffee, and sheep and goat skins. Much of the trade goes through the port of Aden. The capital and principal town is San'a (population about 25,000).

Argentina (Republic)

(República Argentina)

Area: 1,079,965 square miles.

Population (census 1947): 16,108,573 (approx. 97% of European descent, chiefly Spanish and Italian; 3% Indian and other).

Density per square mile: 14.9.

President: Juan D. Perón.

Principal cities (1945 or latest official est.): Buenos Aires, 3,150,000 (capital and chief port); Rosario, 521,210 (flour milling); Avellaneda, 399,021 (industrial suburb of Buenos Aires);

Córdoba, 339,375 (northwest farming center); La Plata, 256,378 (seaport; meat packing).

Monetary unit: Peso.

Languages: Spanish (official), Italian.

Religion: Roman Catholic (state-supported).

HISTORY. A wedge-shaped nation in southeastern South America about a third as large as the U. S., Argentina in 1948 was engaged in a program of industrial and economic expansion under the leadership of President Perón. Its place in world councils was secure again after years of virtual exclusion during World War II. It continued to cooperate in hemispheric affairs while solidifying its relations with neighboring South American nations.

Discovered in 1516 by the Spaniard Juan Díaz de Solís, Argentina developed slowly under Spanish colonial rule. Buenos Aires was settled permanently in 1580 and became a prosperous city; the cattle industry of the Argentine pampas was thriving as early as 1600.

Invading British forces were expelled in 1806-07, and when Napoleon conquered Spain, the Argentinians set up their own government in the name of the Spanish king in 1810. On July 9, 1816, independence was formally declared. Internal dissension, particularly between Buenos Aires and the provinces, was put down under the dictator Juan Manuel de Rosas, who brought about unification from 1829 to 1852. Rosas was overthrown by Justo José de Urquiza, who became the first president under the 1853 constitution, modeled after that of the U. S.

Argentina made great material progress under Presidents Sarmiento (1868-74), Avellaneda (1874-80) and Roca (1880-86). The secret ballot was introduced in 1910 by President Roque Sáenz Peña.

President Hipólito Irigoyen (1916-22) refused to abandon Argentinian neutrality in World War I. Re-elected in 1928, Irigoyen, a radical, was ousted two years later by a conservative revolution led by General José Uriburu. The latter's successor, General Agustín Justo (1932-38) followed a moderate policy and undertook a large public works program. Under the leadership of a former radical, Roberto M. Ortiz, Argentina proclaimed neutrality at the outbreak of World War II, but in general cooperated in hemispheric defense programs.

Ortiz resigned because of illness in June, 1940, and was succeeded by Vice President Ramón Castillo, a conservative, whose regime was toppled in June, 1943, by a revolt led by General Pedro P. Ramírez. The latter abolished all political parties and broke relations with the Axis on Jan. 26, 1944, after disclosures of German spy activity in Argentina. A clique of army officers, apparently fearing that this would lead to war with Germany, replaced Ramírez on Feb. 24, 1944, with General Edelmiro Farrell.

In the closing months of World War II, Farrell's regime declared war on the Axis (March 27, 1945) and signed the Act of Chapultepec the following April 4. Diplomatic recognition and admission to the U.N. followed. Juan D. Perón, then an army colonel, emerged as strongman and won the 1946 presidential elections. In 1947 he introduced a five-year plan of economic development and industrialization.

In Feb., 1948, Argentina unsuccessfully reasserted its century-old claim to the British-owned Falkland Islands and dependent areas in Antarctica. Congressional elections in March increased Peronista representation in the Chamber of Deputies from 102 to 111.

GOVERNMENT. Argentina is a federal union of fourteen provinces and nine territories. Normally a president and vice president are elected every six years by electors who are elected by direct male suffrage. The president appoints his cabinet. The vice president presides over the Senate but has no other powers. Neither is eligible for immediate re-election. The National Congress has two houses—a thirty-member Senate elected by the provincial legislatures for nine-year terms, and a 158-member Chamber of Deputies popularly elected for four years, one-half the membership being renewed every two years.

Each province has its own constitution, elected governor, legislature and judiciary, but the president may in a crisis take over the local government.

The president, with Senate approval, appoints for life-terms the judges of the federal supreme court, five courts of appeal, and district courts (at least one in each province).

DEFENSE. Under legislation enacted Nov. 29, 1946, all men and women 12 to 50 are subject to military service at the president's discretion. Service from 20 to 22 is compulsory. Active army strength in 1948 was estimated at 100,000; a complete modernization program was under way.

The air force has about 150 combat planes. The navy in 1948 totaled approximately 95,000 tons, including two modernized battleships, three light cruisers and 11 destroyers. The budgetary allotment for defense is 38 percent.

EDUCATION. Argentina's estimated illiteracy rate of 15 percent is the lowest in all Latin America. Education is free, secular and compulsory between six and fourteen. Enrollment in 1946 was estimated at 2,000,000. There are six universities, of which the most important is that of Buenos Aires. All were seized by the government in 1946 for alleged interference in politics.

AGRICULTURE. A farming and stock-raising nation, Argentina devotes 41 percent of its area to pasture and 11 percent to cultivation. More than 70 percent of the

cultivated land is planted in cereals—wheat, corn, linseed and oats. In 1947-48 about 14,300,000 acres were devoted to wheat alone. About 20 percent is in alfalfa for stock feed. Cotton, sugar cane and fruits are important, and Argentina is the world's largest producer of yerba maté (Paraguay tea), the national beverage. The 1947 wine production of 256,000,000 gallons was about normal.

Crop production (estimated) in the year 1946-47 included wheat, 5,615,000 metric tons; corn, 6,150,000 tons; oats, 831,000 tons; barley, 1,235,000 tons; linseed, 1,050,000 tons and rye, 569,000 tons.

Cattle raising predominates on the pampas, especially in Buenos Aires province. Sheep raising is more important in Patagonia.

MANUFACTURING. Industrial expansion was accelerated during World War II by the shortage of imports, but industry is still closely allied to agriculture. The principal industry is meat refrigeration, followed by flour milling, textiles, sugar refining, dairy products, quebracho extraction and wine. In 1941 there were 57,940 industrial establishments with 852,154 workers; products were valued at 6,337 million pesos (7,800 million in 1943). Most of the meat packing plants are controlled by U.S. and British interests.

TRADE. Argentina's trade position, favorable in the immediate postwar period, deteriorated steadily in 1947-48 as dollar exchange became scarcer.

VALUE OF TRADE IN PAPER PESOS

Year	Imports	Exports
1937-39*	1,452,000,000	1,762,000,000
1944	1,007,154,000	2,352,881,000
1945	1,154,001,730	2,485,219,642
1946	2,330,300,000	3,937,400,000
1947	5,351,000,000	5,332,000,000

*Average.

Meat exports constituted about one-third of all 1947 exports in value, followed by wheat, hides and skins, wood and forest products. Exports went principally to Great Britain (29.9 percent), United States (9.7 percent), Spain (5.7 percent), Belgium (5.3 percent). Principal sources of imports were the United States (45.4 percent), Brazil (8.1 percent), Britain (8.3 percent), Italy (3.5 percent). The leading imports were textiles, chemical products, fuels and lubricants, foodstuffs, iron and iron manufactures and machinery.

COMMUNICATIONS. The merchant fleet in 1943 consisted of 4,079 ships of 455,807 tons, of which 135,000 tons (1946) were government-owned. The chief ports are Buenos Aires, second only to New York in the western hemisphere, and La Plata, both on the Plata estuary; and Rosario, a port on the Paraná River.

Railway mileage in 1946 was 26,384, nearly all of which radiates outward from Buenos Aires. With the purchase on Feb. 13, 1947, of the British-owned railways for \$150,000,000, the system is now government-owned. Highway mileage in 1946 was estimated at 254,370, largely unimproved. Telephones in 1945 totaled 493,055; broadcasting stations 72 (1946), and radio sets 1,250,000. Five principal airlines are in operation and extend as far south as Tierra del Fuego. Direct international connections exist with neighboring countries.

FINANCE. The 1948 budget balanced the ordinary and extraordinary items at 6,400,000,000 and 1,146,000,000 pesos respectively. The national internal debt (Nov. 30, 1946) was 10,436,900,000 pesos, while the external debt was 11,100,000 pesos in pounds, 144,300,000 pesos in dollars and 83,400,000 pesos in Swiss francs. British investments on Dec. 31, 1947, were \$349,135,633, with about 75 percent in railways (the latter interests were formally taken over by the government on March 1, 1948). U. S. investments in government obligations in 1943 were \$310,596,310, while direct investments in industry in 1940 were \$387,945,000.

TOPOGRAPHY. Second in South America to Brazil in size and population, Argentina is about 2,070 miles long and 860 miles wide at the maximum. In general, the country is a plain, rising westward from the Atlantic to the Chilean border and the towering Andes peaks, including Aconcagua, 22,835 feet, the highest peak in the world outside Asia. The northern area of the Argentine plain is the swampy and partly wooded Gran Chaco. South of that to the Río Negro is the rolling, fertile pampas, rich for agriculture and grazing, and supporting most of Argentina's population. Next southward is Patagonia, a region of cool, arid steppes with some wooded and fertile sections. The eastern part of Tierra del Fuego, the island southern tip of South America, belongs to Argentina.

CLIMATE. Except for the northern Gran Chaco, which has mild winters and torrid summers, Argentina lies in the south temperate zone. The pampas region has an average temperature of 60°, and freezing is rare. Temperature extremes increase progressively southward. All over Argentina, January is the warmest month and June and July are coolest. At Buenos Aires, the mean annual temperature in January-February is about 73°; in June-July, 50°. The heaviest rainfall, over sixty inches a year, hits the Gran Chaco, while on the pampas it ranges from twenty inches in the west to forty in the northeast.

RIVERS. The three great rivers forming the Plata system—the Paraná, Paraguay and Uruguay—are important commercial arteries in northern Argentina. Rosario

and Santa Fé, 260 and 360 miles respectively above Buenos Aires on the Paraná, are accessible to ocean vessels. Many other river ports lie along the three streams' total navigable length of 1,997 miles.

MINERALS. Argentina must import most of nearly every mineral it uses. Oil is produced in Patagonia (1947: 21,795,000 barrels), and there is small mining of tungsten, lead, gold, zinc, tin, silver and beryllium. The government announced discovery of uranium deposits in Feb., 1947. All mineral production in 1942 was valued at 214,300,-730 pesos, of which oil accounted for more than 60 percent. Coal imports in 1947 came to 1,443,297 short tons.

FORESTS. The Gran Chaco area is the world's chief source of quebracho extract. Total production of this tanning agent obtained from quebracho logs in 1946 was 248,276 tons, of which 215,939 tons were exported. Other forest products—hardwoods, dyewoods, lignum vitae, red quebracho, medicinal gums and other tannins—are consumed locally for the most part.

Austria (Republic)

(Österreich)

Area: 32,369 square miles.

Population (est. 1947): 6,910,502 (practically all Austrian).

Density per square mile: 213.5.

Allied Council: Lt. Gen. Geoffrey Keyes (U. S. A.); Col. Gen. L. V. Kurasov (U.S.S.R.); Lt. Gen. Sir Alexander Galloway (United Kingdom); Lt. Gen. Emile-Marie Bethouart (France).

President: Dr. Karl Renner.

Chancellor: Leopold Figl.

Principal cities (census 1939): Vienna, 1,918,-462 (capital, industrial center); Graz, 210,175 (industrial center); Linz, 131,423 (Danube port); Innsbruck, 80,084 (Tyrolean tourist center).

Monetary unit: Schilling.

Language: German.

Religions (est.): Roman Catholic, 93.68%; Protestant, 3.11%; Jewish, 2.93%; unknown, .28%.

HISTORY. Austria, lying at the western edge of the "iron curtain" in central Europe, continued to be occupied by foreign troops in 1948, with little immediate prospect of complete independence.

The history of Austria before World War I was largely that of the Austro-Hungarian Empire and the Hapsburg dynasty. Its origin was in the province of Ostmark, separated from Bavaria and given to Leopold of Babenberg (A.D. 976) by the Holy Roman Emperor, Otto II. It was ruled by the Babenbergs until 1246, and later passed to Ottakar of Bohemia, who lost it to Rudolf of Hapsburg (1276). In 1437, the three kingdoms of Austria, Hungary and Bohemia were united under the rule of Albert V. For three centuries thereafter, despite al-

most constant warfare, the states remained for the most part under a single crown. The Hapsburgs gradually added to their possessions, until Charles V, during the 16th century, ruled a vast part of Europe. Emperor Francis I laid down the Holy Roman crown in 1806 at the height of the Napoleonic Wars, in which Austria with her allies was finally victorious. Influence in Germany was lost through defeat by Prussia in the Seven Weeks' War (1866). In 1867, the Dual Monarchy of Austria and Hungary was established, united in the person of the sovereign, Franz Josef I, who ruled until 1916.

Following the defeat of the Central Powers in World War I, the republic of Austria was established in Nov., 1918. It was confined to its present borders by the Treaties of St. Germain (1919) and Trianon (1920). The years immediately following the war were a period of privation, dissension and riots, with Austrian currency becoming worthless and the nation bankrupt. Establishment of a semi-dictatorship by Engelbert Dollfuss, who had become Chancellor in 1932, was followed by an unsuccessful Socialist revolt (Feb., 1934) and an attempted Nazi coup d'état which failed, although Dollfuss was killed. He was succeeded by Kurt von Schuschnigg, whose futile efforts to maintain Austria's independence ended (March 12, 1938) with the bloodless occupation of Austria by German troops. Hitler proclaimed the *Anschluss* of Germany and Austria the next day.

Following the liberation of Vienna by the Red Army (April 13, 1945), Dr. Karl Renner, veteran Socialist, formed a provisional government. Elections held Nov. 25, 1945, resulted in victory for the People's Party, whose leader, Leopold Figl, became chancellor. Dr. Renner was elected president of the Second Austrian Republic (Dec. 20, 1945).

The failure of the Big Four to draft a treaty with Austria at the Moscow Conference (April, 1947) dashed her hopes for immediate independence and for the evacuation of Allied occupation troops. The deputies of the foreign ministers met several times in 1947 and in 1948, but were unable to reach agreement on two major issues—a definition of German-owned assets in Austria, and the demands of Yugoslavia for reparations from Austria and for the cession of "Slovene Carinthia" and parts of Styria.

ALLIED MILITARY GOVERNMENT. Since World War II, Austria within its 1937 frontiers has been divided into four national zones, as is the city of Vienna. The Allied Council and the inter-Allied governing authority of Vienna consist of the ranking officers of the four participating nations—the U. S., Britain, France and the U. S. S. R. By an agreement signed by the four powers June 28, 1946, giving the government power

to enact domestic legislation, the Council's functions became supervisory rather than administrative.

NATIONAL GOVERNMENT. Austria is a federal republic comprised of nine provinces (including Vienna), each of which has its own elected assembly for the control of regional affairs. The federal parliament consists of two houses—the *Bundesrat* whose members are nominated by the provincial assemblies and the *Nationalrat* whose 165 members are chosen by national election. The president of the republic is elected by parliament in joint session for a six-year term. The government is administered by the chancellor and his cabinet. In the elections of Nov., 1945, for the *Nationalrat*, 85 members of the Austrian People's Party, 76 Socialists and 4 Communists were returned.

SOCIAL AND ECONOMIC CONDITIONS. Agriculture employs more than one-third of the population but the country is heavily dependent on imported foodstuffs. About 90 percent of the total area is classified as productive; of this area, about 40 percent is intensively cultivated as plowland, meadowland, gardens and vineyards. The amount under plow is relatively small, and mixed farming predominates. Rye and wheat are the leading cereals, with 1947 production amounting to 216,200 and 169,500 metric tons respectively, followed by oats (173,100 tons) and barley (94,300 tons). Potato production in 1946 was 1,687,000 tons and sugar beets, 1,325,000 tons. Other crops include hops, grapes, flax, fruits and tobacco.

Stock raising and dairy farming both in the Alpine pastures and the lowlands of the east were of increasing importance prior to World War II.

Austria continued to be heavily dependent on food imports in 1948 and was scheduled tentatively to receive aid amounting to \$185,600,000 under the European Recovery Program during 1948-49.

Austria is primarily an industrial country, but facilities have been depleted by war damage and by Soviet reparation removals. Fuel and raw material shortages have also hampered recovery. The metallurgical, engineering, textile and wood industries are most important. Styria is responsible for almost all the iron and steel production.

Legislation providing for the nationalization of 70 firms, comprising a substantial portion of Austrian basic industry, was enacted late in 1946. Most of the industrially important regions are in the Soviet zone.

The constantly unfavorable prewar trade balance was offset in part by international loans and in part by invisible exports, such as tourist expenditures, income from foreign investments and transit trade.

Trade statistics are as follows (in millions of schillings):

	1937	1946	1947
Exports	1,222	219	842
Imports	1,456	1,756*	1,191

*Including UNRRA and other relief shipments.

Principal sources of imports (excluding relief shipments) in 1947 were southeastern Europe 27.4%, Germany 17.6%, western Europe 17.5% and Switzerland 13.5%. Chief customers were southeastern Europe 27.6%, Switzerland 25.2%, Italy 16.0%, and western Europe 15.9%. Relief shipments into Austria and foreign credits totaled 2,006,000,000 schillings.

The construction of railways and roads has been hampered by physical difficulties. There are more than 4,000 miles of railway line, partly electrified. Water traffic is restricted for the most part to the Danube River. The major river ports are Linz and, especially, Vienna, which is also an important rail, road and air center.

Revenue in 1947 was estimated at 2,987,400,000 schillings and expenditures at 3,514,900,000 schillings. Cost of Allied occupation was 399,500,000 schillings.

NATURAL FEATURES AND RESOURCES; CLIMATE. Austria covers an area about equal to that of Scotland and includes much of the mountainous territory of the eastern Alps (about 92.3 percent of the country is classified as mountainous). From the Rhine Valley, Austria's western frontier, these ranges cross the country from west to east, merging on the north and northeast into the Danube Valley and the open Vienna basin. On the east and southeast, the ranges merge into the forested foothills overlooking the undulating countryland of western Hungary. The country contains many snowfields, glaciers and snow-capped peaks. The principal river, the Danube, enters in the northwest and crosses northern Austria.

Austria possesses valuable mineral resources. In Styria lies one of the largest European deposits of iron ore. Copper is mined in Salzburg, Tyrol and lower Austria, and lead and zinc in Carinthia. Other minerals include bauxite, graphite, sulfur and manganese. Fuel resources comprise small coal deposits in lower Austria and large quantities of lignite, found everywhere except in Salzburg. Production in 1947 was 1,311,890 metric tons. Heavy supplies of coal and coke must be imported, but extensive water power resources are available for exploitation. Petroleum fields in the Zistersdorf and Mühlberg areas, both in the Soviet zone, produced an estimated 5,100,000 barrels in 1946.

Variety is the keynote of Austria's climate. The mean annual temperature in the north ranges between 45° and 48°, and in no month does the average exceed 68°. Most of the rainfall occurs during summer.

In the Tyrol, mild winters and warm summers (with temperatures often higher than 68°) are customary; maximum precipitation is in spring and summer. The mean annual temperature of Vienna is 49.4°, and the range about 40°.

Belgium (Kingdom)

(Royaume de Belgique—Koninkrijk België)

Area: 11,775 square miles.

Population (est. 1947): 8,452,584 (Walloon, Flemish).

Density per square mile: 717.8.

Sovereign (in exile): King Leopold III.

Regent: Prince Charles, brother of the King.

Prime Minister: Paul-Henri Spaak.

Principal cities (est. 1945): Brussels, (Bruxelles), including suburbs, 1,282,438 (capital); Antwerp (Anvers), 767,619 (port and commercial center); Liège, 534,725 (iron and steel); Ghent (Gand), 435,278 (textiles).

Monetary unit: Belgian franc.

Languages: French, Flemish.

Religion: Predominantly Roman Catholic.

HISTORY. In 1914 and again in 1940, Belgium was crushed by German armies because its position in the Low Country area made it a highway on the invasion route to France. Highly industrialized, a bit larger than Maryland and the most densely populated nation in Europe, Belgium emerged from World War II in fair economic condition but, politically, the country suffered crisis after crisis in the struggle between conservatives and elements of the left, especially over the return of King Leopold III to the throne. By 1948, however, the nation had recovered its political stability and was enjoying a high degree of economic prosperity.

Perhaps the earliest mention of the Belgians in history was in 57-50 B.C., when they were conquered by Julius Caesar. In the Middle Ages the Belgian towns became wealthy and virtually autonomous as great textile centers. Belgium became part of Burgundy in 1385, and later, part of the Spanish domains of Charles V. By the Treaty of Utrecht, in 1713, Belgium went to Austria, though retaining its autonomy, and from 1792 to 1815 it held a similar status under France. United with the Kingdom of the Netherlands by the Congress of Vienna in 1815, the Belgians revolted and proclaimed independence on Oct. 4, 1830, choosing as their sovereign Leopold of Saxe-Coburg. Taking the title of King Leopold I, he ruled from 1831 to 1865.

Belgium progressed peaceably under Leopold I and his son, Leopold II, who reigned from 1865 to 1909, and was succeeded by his nephew, Albert I (1909-34).

Despite heroic Belgian resistance under the personal leadership of Albert, the country was overrun by the Germans in 1914

and occupied throughout World War I. The treaty of 1919 gave Belgium the regions of Moresnet, Eupen and Malmédy, and a mandate over Ruanda-Urundi in Africa.

As World War II approached, Belgium strove to protect its legal neutrality; at the same time the nation rearmed rapidly and built a strong series of fortifications, especially along the Albert Canal. But these defenses were no great obstacle to the Germans, who invaded the country for the second time in a generation on May 10, 1940.

King Leopold III, who had succeeded his father upon the latter's death in a mountain-climbing accident in 1934, ordered the Belgians to surrender to the Nazis and was taken prisoner on May 28, 1940—eighteen days after the initial German attack. From the point of view of Belgium alone, his action was regarded as perhaps sensible, but the abrupt end of Belgian resistance contributed to the entrapment of the British and French at Dunkirk. The cabinet of Hubert Pierlot escaped from the country and set up a government-in-exile in London. When that government returned to Belgium on Sept. 7, 1944, King Leopold's brother, Prince Charles, was elected regent (Leopold was still a prisoner). Pierlot, a Catholic, became head of a coalition government. He was succeeded in Feb., 1945, by Achille van Acker (Soc.).

The Christian Socialists (Catholics) won a plurality in the elections of Feb. 17, 1946. Because of their pro-Leopold stand, however, they could not take office. The country was ruled by the Liberal-Socialist-Communist cabinets of Van Acker (Mar. 31, 1946) and Camille Huysmans (Aug. 2, 1946) until March, 1947, when Socialist Paul-Henri Spaak formed a Socialist-Christian Socialist coalition cabinet. On March 17, 1948, Belgium signed with Britain, France, Luxemburg and the Netherlands a 50-year defense, economic, social and cultural treaty.

Leopold III was born Nov. 3, 1901; in 1926 he married Princess Astrid of Sweden. They had three children, of whom Prince Baudouin (born 1930) is heir apparent. Astrid was killed in 1935 in an automobile accident. On Sept. 11, 1941, while he was a German prisoner, Leopold married a commoner, Marie Baels. She renounced the title of queen upon marriage, and became Princess de Réthy. The regent, Prince Charles, was born Oct. 10, 1903.

GOVERNMENT. Under the 1831 constitution, Belgium is a constitutional, hereditary monarchy. The king's authority is delegated to the ministers whom he appoints and dismisses to conform with the parliamentary majority. The ministers who constitute the cabinet must have the confidence of parliament, which consists of a 202-member chamber of deputies popularly elected, and a senate of varying member-

ship, elected both directly and indirectly. All members serve for four years unless one or both houses are dissolved by the king, in which case new elections must be held in forty days. Belgium's nine provinces and 2,670 communes have crown-appointed officials but retain considerable autonomy with locally-elected councils.

The 1946 elections returned 92 Christian Socialists, 70 Socialists, 23 Communists and 17 Liberals to the Chamber of Deputies. Party standing in the Senate after the elections was Christian Socialist 83, Socialist 55, Communist 17 and Liberal 12.

The home army in 1948 was unofficially estimated at 85,000 men, organized in one army corps of two divisions. In the British zone of Germany, Belgium had 30,000 men. Belgian Congo was garrisoned by 18,000 men in three brigades of native troops with Belgian officers. The air force has about 110 combat planes. The navy, abolished in 1928, is now being reformed, with a contemplated 2 or 3 frigates, 8 mine-sweepers, and 12 fast launches.

EDUCATION. Education, free and universal for children from six to fourteen, is under state control in three divisions: primary, intermediate and higher. Primary schools in 1945 numbered 8,714 with 828,996 students; intermediate schools (1947), 447 with 100,459 students. There are four universities: official, Ghent and Liège; unofficial (private), Brussels and Louvain with a total of 17,138 students in 1946. There are also private schools, many under religious auspices.

AGRICULTURE. About 60 percent of the total area is under cultivation, and one-half the farmed area is devoted to forage crops. Principal crops in 1947 (in short tons) were wheat 134,220, rye 197,174, barley 178,001 and oats 561,361. Other crops are sugar and fodder beets, flax and fruit. The pastoral industry, especially dairy farming, flourishes. In 1947 Belgium had 1,729,453 cattle, 169,974 sheep and 615,582 hogs. Butter production was 27,450 short tons and cheese 3,250.

MANUFACTURING. Belgium is one of the most highly industrialized nations in Europe, largely because of vast, readily accessible coal reserves. Industry has not advanced, however, at the expense of agriculture; the Belgian economy is based on both. According to the last industrial census, in 1930, there were 220,871 industrial establishments with 1,938,000 workers (almost 25 percent of the population), led by the metallurgical, textile and building industries in that order. Associated with iron and steel is a considerable engineering industry, shipbuilding in Antwerp, and machinery and railway stock in Brussels. The centuries-old textile industry produces linen (Courtrai); cotton (the southeast); and synthetic fibers. Antwerp, using the

output of mines in the Congo and Angola, rivals Amsterdam in diamond cutting.

Foreign trade is especially vital to the Belgian economy. The Belgian-Dutch-Luxemburg customs union (Benelux), established on Jan. 1, 1948, is one of the five great trading areas in the world. Trade (in billions of francs) is as follows:

	1936	1946	1947
Exports	21.7	29.6	61.5
Imports	22.6	52.2	84.9

Chief customers in 1947 were the Netherlands, 12.7%; France 12.3%; Britain 9.8% and the U.S. 4.4%. Leading sources of imports were the U.S. 26.4%, France 11.3%, Belgian Congo 7.2% and Britain 9.2%.

COMMUNICATIONS. Inland transportation facilities are highly developed. Railroad mileage is 3,090. Navigable waterways total 998 mi., including the well-developed canal system. Before World War II Belgium had the second largest river fleet on the Rhine. Highway mileage in 1945 totaled 6,433, mostly improved. The merchant fleet in 1947 totaled 63 ships (over 100 tons) of 183,121 net tons. Sabena, the government-controlled airline, flew 7,328,908 km. in 1946 and carried 121,178 passengers.

FINANCE. Revenue in 1947 was estimated at 40,697,000,000 francs and expenditures at 51,000,000,000 francs. The public debt June 30, 1947, was 279,585,000,000 francs and the gold reserve (Oct., 1947), 26,960,000,000.

NATURAL FEATURES AND RESOURCES; CLIMATE. The northern third of Belgium is a plain extending eastward from the coast of the North Sea. North of the Sambre-Meuse Rivers is a low plateau, varying from 250 to more than 600 feet in height, and to the south lies the Ardennes plateau, rising to a maximum of about 2,300 feet. The shallowness of the North Sea off Belgium precludes the development of good harbors; some of the port advantages of Antwerp, on the Schelde River, are offset by the fact that the approaches to it are through Dutch territory.

The principal mineral is coal; production in 1947 was 24,390,110 metric tons. The Ardennes coalfield, now nearly exhausted, extends southward into France. The Campine field, comparatively new, lies in the northeast. Iron ore, lead and zinc also are mined, principally in the Ardennes. Belgian mining, highly developed, normally employs about 200,000 people.

Forests cover about 20 percent of Belgium, but their products are relatively unimportant. Fishing is vital in the economy. The 1946 catch was 77,000 short tons.

The climate is temperate. Ostend, on the sea, has an average annual temperature of 49° and annual rainfall of 27.5 inches, about like that of Chicago. Baraque Michel, in the Ardennes heights, has an average

temperature of 43°, rainfall of 59.5 inches, and considerable snow in the winter.

Belgian Colonial Empire

Country	Area (sq. mi.)	Native pop. (est. 1947)
Belgian Congo (colony)	904,974	10,667,087
Ruanda-Urundi (U. N. trust territory)	20,120	3,386,000

BELGIAN CONGO (CONGO BELGE).

Status: Colony. *Capital:* Léopoldville (population 1947: 116,468 [European, 6,188]). *Governor General:* Eugène Jüngers. *Foreign trade:* exports (1947) 10,102,897,000 francs; imports (1945) 1,957,646,000 francs; chief exports, by value: copper, cotton, gold, palm oil. *Agricultural exports* (1946, metric tons): cotton 46,694; coffee 19,555; sugar 7,086. *Mineral production* (1946): copper (smelter), 143,885 metric tons; diamonds, mainly industrial, 6,057,783 carats; gold, 10,305 kg.; silver, 5,050,000 oz.; tin ingots, 3,590 metric tons; manganese (1944), 2,983 metric tons. *Forest products* (1946 exports, metric tons): palm oil, 88,079; palm kernels, 48,909; rubber, 4,540; gum copal, 19,693. Most of the above includes production of Ruanda-Urundi.

The mineral-rich Belgian Congo, in central Africa, with a narrow outlet to the Atlantic through the northwestern tip of Portuguese Angola, was acquired Nov. 15, 1908, by the Belgian state from the Belgian king, Leopold II. The latter had backed exploration of the area by the English explorer, H. M. Stanley, and in 1885 had been recognized by the great powers as personal sovereign and proprietor of the Congo Free State, as it was then called. The area is now administered by a governor general responsible to the cabinet minister for the colonies. The governor general has unrestricted executive and legislative powers, and the colony has no representative institutions of its own. During World War II it furnished vital war materials to the Allies. The European population in 1947 was 35,772, of whom 24,058 were Belgians. **RUANDA-URUNDI.** *Status:* U.N. trust territory, united administratively with the Belgian Congo. *Capital:* Usumbura. *Governor General:* Eugène Jüngers. *Foreign trade:* exports (1946) 250,766,000 francs; imports (1945) 222,165,000 francs. *Principal products:* tin, coffee, gold, cotton, hides.

Ruanda-Urundi, in east Africa, was assigned to Belgium as a mandate by the League of Nations at the end of World War I, before which it was a portion of German East Africa. It is administered under the direction of the governor general of the Belgian Congo by a vice governor general. The area, placed under U.N. trusteeship in Dec., 1946, is largely mountainous, with livestock grazing the principal native activity.

Bhutan (Kingdom)

Area: approx. 18,000 square miles.

Population (est.): 250,000 (mostly Bhotiya).

Density per square mile: 13.9.

Ruler: Maharaja Jig-me Wang-chuk.

Principal city: Punakha.

Monetary unit: Indian rupee.

Language: Tibetan dialect.

Religion: Buddhism.

HISTORY. Bhutan is a small independent state lying on the southeast slope of the Himalayas, bordered on the north by Tibet and on the east, south and west by the Dominion of India. The area is said to have been invaded and settled by Tibetan troops in the 9th century A.D. After almost a century of conflict between the Bhutanese and the British in India, British troops invaded the country in 1865 and negotiated an agreement under which Britain undertook to pay an annual allowance to Bhutan on condition of good behavior.

Until 1907 Bhutan's government was under the dual control of the clergy and laity, but the country is now ruled by a hereditary maharaja.

The dominant people are the Bhotiyas, who are of Tibetan origin, speak a Tibetan dialect, and profess the same form of Buddhism as is prevalent in Tibet.

ECONOMIC CONDITIONS. The chief crops are rice, corn and millet; the fields, laid out on hillside terraces, are watered by an ingenious system of irrigation. Bhutan is famous for its small though sturdy mountain ponies. The chief industries are metal work, cloth weaving and fine basket and mat work. Trade is insignificant, and much of it is conducted by barter.

NATURAL FEATURES. The whole of Bhutan presents a succession of lofty and rugged mountains running generally from north to south and separated by deep valleys. Mountains in the north reach a height of 24,000 feet. The climate varies according to the topography. There are valuable forest stands ranging from semi-tropical woods on the lowest slopes to coniferous forests on the more temperate slopes to the north.

Bolivia (Republic)

(República Boliviana)

Area: 416,040 square miles.

Population (est. 1947): 3,854,000 (1944: 52% Indian, 28% Mestizo, 13% white, .2% Negro, 6.8% unspecified).

Density per square mile: 9.2.

President: Dr. Enrique Hertzog.

Principal cities (est. 1946): La Paz, 301,000 (de facto capital); Cochabamba, 80,000 (commercial center); Oruro, 50,000 (tin mines); Potosí, 40,000 (mining); Sucre, 32,000 (legal capital).

Monetary unit: Boliviano.

Language: Spanish.

Religion: Roman Catholic.

HISTORY. Famous since Spanish colonial days for its mineral wealth, modern Bolivia was once a part of the ancient Incan Empire. After the Spaniards had defeated the Incas during the first part of the 16th century, Bolivia was subjected to the Spanish Viceroyalty of Peru, and its predominantly Indian population was reduced to slavery. During the successive South American revolts against Spain in the early 19th century, Upper Peru (as Bolivia was then called) was a vast battlefield contested by Spanish and patriot troops. The country finally won its independence in 1825; the new republic was named after Simón Bolívar, South America's famed liberator.

Bolivia's political history since independence has been extremely stormy, even by the standards of a continent noted for its preference of bullets to ballots. Since 1825 it has had more than sixty revolutions, seventy presidents and eleven constitutions. No elected president has ever served out his term.

Harassed by internal strife, Bolivia lost great slices of territory to three neighbor nations. Several thousand square miles and its outlet to the Pacific were taken by Chile after a disastrous war in 1879-83. In 1903 a piece of Bolivia's Acre province, rich in rubber, was ceded to Brazil. And in 1938, after a war with Paraguay, Bolivia gave up claim to nearly 100,000 square miles of the Gran Chaco.

The last decade has been typical of Bolivia's turbulent political history, with four illegal seizures of power culminating in a leftist revolution on July 21, 1946, which overthrew the rightist regime of Lt. Col. Gualberto Villarroel, who in Dec., 1943, had ousted the legally elected president, Gen. Enrique Peñaranda. Villarroel was murdered by a mob which stormed the presidential palace. Elections held Jan. 5, 1947, gave none of the presidential candidates an absolute majority. The slight plurality of Dr. Enrique Hertzog, candidate of the Socialist Republican Union, a center group, was endorsed by Congress and he took office for a four-year term on March 10, 1947. The first year of Hertzog's administration was marked by continued political and labor unrest.

GOVERNMENT. Under the 1938 constitution, Bolivia is a republic, electing by popular vote a president every four years, a 27-member Senate every six years, and a 111-member Chamber of Deputies every four years. The president appoints the nine members of his cabinet. The Indian majority is virtually disfranchised, and less than 3 percent of the population voted in the 1947 presidential elections.

Military service is compulsory, with a two-year training period beginning at nineteen and service on reserve until fifty. The army is fixed by law at 15,000, but falls several thousand short of this number. The air force is being re-organized and trained by U. S. officers.

SOCIAL AND ECONOMIC CONDITIONS. Bolivia has an illiteracy rate estimated in 1946 at 80 percent, highest in Latin America. A contributing factor is the high proportion of pure Indian population. In 1944 enrollment at 1,740 primary schools was 144,056, and at 55 intermediate schools, 17,496. There are five universities and several normal schools and educational centers for Indians. The government is reorganizing the curriculum for rural schools.

Mining is the backbone of the economy. Tin, accounting normally for 70 percent of Bolivian exports, is by far the most important mineral, most of it coming from the plateau regions of Potosí and Oruro. In normal times, Bolivia is the world's third largest tin producer; during World War II and immediately after, it was first.

Mineral production for 1946 was as follows: tin, 37,618 long tons; silver, 6,100,000 ounces; gold, 3,000 ounces; copper, 6,754 short tons; antimony, 7,676 short tons; zinc ore, 21,151 short tons. Lead, manganese ore, tungsten concentrates, and mercury are also produced. Southern Bolivia is rich in oil, as yet relatively unexploited. Production in 1947 was at the rate of approximately 30,000 barrels monthly.

The 5,000,000 acres under cultivation produce wheat, rice, sugar, potatoes, cacao, barley, maize, coca (source of cocaine), tobacco and cotton. Production of such basic foodstuffs as wheat and rice, however, is insufficient for domestic needs, and considerable quantities must be imported. Cattle are raised in the more temperate regions of the east and south, sheep in the departments of La Paz and Cochabamba, and llamas, alpacas and vicuñas, important sources of hides, wool and meat, are raised on the plateaus by Indians whose economy is largely dependent upon them. The fur-bearing chinchilla, a native of the colder plateau regions, is also bred.

Manufacturing received considerable impetus during the Chaco War, but the output is insufficient to supply the domestic demand. Almost three-fourths of the manufacturing is carried on in La Paz. Major manufactures in 1944 had a value of \$24,020,000.

Tin and other minerals comprise almost the whole of Bolivia's exports. Since the country is landlocked, foreign trade must pass through free ports in Chile and river ports on the Amazon. The U. S. and Argentina are the principal sources of imports. Trade statistics for three years follow (in millions of U. S. dollars):

	1938	1945	1946
Exports	34.4	80.3	72.4
Imports	25.0	40.4	52.2

Exports in 1947 totaled \$83,200,000.

From its lowland tropical forests, Bolivia gets rubber, quinine bark, almonds and brazil nuts, dyewoods, mahogany, quebracho and other hardwoods. Rubber exports in 1946 were 5,200 short tons.

Railway mileage totals 1,407, all in western Bolivia; the principal lines connect La Paz with the Chilean ports of Arica and Antofagasta. Highway mileage in 1945 was 3,710, much of it unimproved. Airlines play an important role in Bolivian transportation: national airlines, including the Lloyd Aéreo Boliviano, covered 3,495 route miles in 1943, and Pan American Airways links the country with the rest of the Americas. In the lowlands, thousands of miles of navigable streams are the chief means of transportation.

Bolivia's 1948 budget, as finally announced in April, 1948, balanced receipts and expenditures at 1,496,911,040 bolivianos. On Dec. 31, 1946, the external debt was 130,254,103 bolivianos and the internal debt, 981,038,711.

NATURAL FEATURES AND CLIMATE. Landlocked Bolivia is a low alluvial plain throughout 60 percent of its area toward the east, drained by the Amazon and Plata river systems. The western part, enclosed by two chains of the Andes, is a great plateau—the Altiplano—measuring 500 by 80 miles at an average altitude of 12,000 feet. More than 80 percent of the population lives on the plateau, which also contains La Paz, the highest capital city in the world. Lake Titicaca, half the size of Lake Ontario, is one of the highest large lakes in the world, at an altitude of 12,507 feet. Islands in the lake hold ruins of the ancient Incan civilization.

The climate varies from the humid heat of the equatorial lowlands in the east to the arctic cold of the Andean peaks. In the lowlands, the average temperature is about 77°, with no great departures; rainfall is heavy throughout the year. At higher elevations in the west (to 11,000 ft.) the climate is temperate, with occasional winter frost. In the great central plateau, the weather is always cool. In La Paz it averages about 50.4°.

Brazil (Republic)

(Estados Unidos do Brasil)

Area: 3,291,416 square miles.

Population (est. 1947): 48,000,000 (1945: white, 63%; Mestizo, 21%; Negro, 14%; Indian and other, 2%).

Density per square mile: 14.6.

President: Eurico Gaspar Dutra.

Principal cities (est. Dec. 31, 1946): Rio de Janeiro, 2,014,185 (est. Dec. 31, 1947, 2,052,-

672) (capital and chief port); São Paulo, 1,514,-241 (coffee); Recife (Pernambuco), 397,808 (seaport); Salvador (Baia), 331,609 (seaport); Porto Alegre, 310,817 (seaport); Belo Horizonte, 241,337 (mining); Belém (Pará), 235,576 (Amazon port).

Monetary unit: Cruzeiro.

Languages: Portuguese (official), Italian, German.

Religion: Roman Catholic, 95%.

HISTORY. Brazil, the only Latin American nation deriving its culture and language from Portugal, is by far the largest country in South America, covering nearly half the continent. In the Western Hemisphere it is second to Canada. In the world, it ranks after the U.S.S.R., China and Canada.

Brazil was discovered in 1500 by the Portuguese admiral, Pedro Alvares Cabral. Portuguese colonization efforts began in 1532 and Brazil became a royal colony seventeen years later. The later attempts of France and Holland to colonize Brazil were defeated by the Portuguese.

During the Napoleonic wars, the prince regent of Portugal (later King John VI) fled his country in advance of the French armies, and set up his royal court at Rio de Janeiro in 1808. John was drawn home by a revolution in 1820 and the Brazilians, after holding the seat of Portuguese government, rebelled at resuming colonial status and declared their independence in 1822 under Pedro, son of John VI. Harassed by trouble with his parliament, Pedro I abdicated in 1831 in favor of his five-year-old son, who became emperor in 1840 as Pedro II. He proved to be an enlightened and popular monarch.

Despite his good works, however, Pedro II was forced to abdicate in 1889 following a military revolt, after which a republic was set up. Until 1893 Brazil was under two military dictators, Marshal Deodoro da Fonseca and Marshal Floriano Peixoto. After a revolt against the latter in 1893, Brazil returned gradually to stability under a succession of five civilian presidents—Prudente de Moraes Barros, 1894-98; Manuel Ferras de Campos Salles, 1898-1902; Francisco de Paula Rodrigues Alves, 1902-06; Afonso Penna, 1906-09, who died in office; and Nilo Pecanha, 1909-10.

The president during World War I, Wenceslau Braz, cooperated with the Allies and declared war on Germany Oct. 26, 1917. Reckless expenditure marked the term of the next chief executive, Epitacio da Silva Pessoa, 1919-22, while the presidency of Arthur Bernardes, 1922-26, was bedeviled by financial difficulties and army dissension. His successor, Washington Luis Pereira da Souza, 1926-30, had to cope with the world depression and was overthrown by a revolutionary group under Getulio Vargas, who took over as provisional president.

Vargas' new constitution in 1934 sharply

curtailed state's rights and emphasized a nationalistic policy. In 1937 Vargas seized absolute power, setting up another constitution which extended his term of office indefinitely. In World War II, Brazil cooperated well with the United Nations. Allied air bases were set up in Brazil, Brazilian naval forces patrolled the South Atlantic, and a Brazilian expeditionary force fought in Italy after the nation's declaration of war against the Axis in Aug., 1942.

National fear that Vargas would never fulfill his promise of free elections led to his overthrow on Oct. 29, 1945, and the transfer of his powers to Chief Justice José Linhares. In the subsequent elections, on Dec. 2, 1945, victory went to the Vargas candidate—Gen. Eurico Gaspar Dutra, inaugurated as president on Jan. 31, 1946.

In Jan., 1948, Dutra's Social Democratic party and the opposition National Democratic Union pledged their support of the government in its fight against Brazilian Communists. The Chamber of Deputies voted to oust all Communist legislators on Jan. 7, and Dutra thereafter intensified his anti-Red campaign.

GOVERNMENT. Under the Constitution of Sept. 18, 1946, Brazil is a federation of twenty states, five territories and one federal district. The president is popularly elected for a five-year term and may not succeed himself. The national Congress is composed of two houses—the Senate, whose members serve for eight-year terms, and the Chamber of Deputies, elected for four-year terms. Members of Congress are elected by equal, direct, compulsory and secret suffrage under a system of proportional representation.

Among the important innovations of the new Constitution are articles empowering the federal government to create state-owned monopolies in the public interest and making the exploitation of mines and subsoil resources dependent on federal authorization. The Constitution also authorizes the government to intervene in labor disputes but recognizes the general principle of freedom of association and the right to strike. Labor courts handle labor-management disputes.

The twenty states, with popularly elected legislatures and governors, and their own constitutions, have considerable autonomy, but during the Vargas regime they suffered from federal intervention.

DEFENSE. Military service is compulsory beginning at twenty-one, with an initial training period of one year and service on reserve until forty-five. The permanent army of 112,300 men and 258,000 reserves in 1940 was greatly expanded in World War II. Its strength in 1947 was unofficially estimated at 110,000 men in eight divisions. The army received a considerable amount of U. S. lend-lease military goods during World War II. The air force, under a sepa-

rate Ministry of Aviation since 1941, expanded during the war and took an active part in the Italian campaign.

The navy on Dec. 31, 1947, had two old battleships, an old light cruiser, 13 destroyers, and smaller craft with a total estimated tonnage of approximately 50,000. During World War II about thirty small warships were acquired, mostly from the United States.

EDUCATION. Education is free and compulsory; under the 1946 constitution it is given in Portuguese only. According to the 1940 census, 43.6 percent of the population 18 years of age and over could read and write. In 1946, there were 47,047 primary schools with 3,548,409 students. Secondary schools (1944) numbered 1,235 with 221,199 students. Vocational, commercial and professional schools had an enrollment of 255,368 in 1943. There are 10 universities, of which 3 are private (Catholic), 6 state and one federal (University of Brazil at Rio de Janeiro).

AGRICULTURE. Agriculture is the basis of Brazil's economy, but only 4 percent of its area is under cultivation, the rest being grazing, forest, or non-productive land. Brazil leads the world in production of coffee and castor beans, and ranks second in cacao. Production and export of both coffee and cacao are government-controlled. The most important agricultural products in 1946 were rice (46,198,634 bags of 132-lb. each), cotton (352,752 metric tons), sugar cane (28,300,000 metric tons), beans (17,000,000 bags of 132-lb. each), tobacco (118,500 metric tons), wheat (248,058 metric tons), cacao (138,000 metric tons) and coffee (15,335,675 bags of 132-lb. each, valued at 5,350,029,000 cruzeiros). Almost 10 million acres are planted in corn, of which Brazil is the second largest producer in the Western Hemisphere. Other crops include manioc, fruits, bananas and coconuts. The total value of agricultural production in 1946 was about 23,622,000,000 cruzeiros.

Livestock is raised nearly everywhere, with the great centers in the central and southern states. There were 42,100,000 cattle in 1946. A hog plague killed hundreds of thousands of animals in 1946-47.

MANUFACTURING. Manufacturing is still primarily for domestic consumption, but industrialization is progressing rapidly, although hampered by equipment shortages.

The state of São Paulo is by far the leading industrial area. The value of industrial production in 1946 was estimated at \$1,125,000,000. Leading industrial products are foodstuffs, textiles, chemicals and pharmaceutical products, metallurgical products, clothing, leather, glass and porcelain, paper and rubber articles. The most important single industry is cotton weaving, with 440 establishments employing 25 percent of all industrial labor.

Brazil's first steel plant, at Volta Redonda, began production on June 23, 1946. Production of pig iron in 1947 was 480,638 metric tons and steel, 388,024 tons.

Foreign trade, largely hemispheric, continues to increase in both volume and value, but was retarded in 1948 by scarcity of dollar exchange. Principal exports are coffee, cotton cloth, raw cotton, cacao, meats, vegetable oils and rubber. Leading imports include machinery, manufactures, foodstuffs (largely Argentine wheat) and petroleum products.

Trade statistics for three years follow (in billions of cruzeiros):

	1938	1946	1947
Exports	5.10	18.24	21.18
Imports	5.20	13.03	22.79

In 1947, Brazil's chief customers, by value, were the U. S., 38.7 percent; Argentina, 9.9 percent and Britain, 7.8 percent. Leading suppliers were the U. S., 61.3 percent; Britain, 6.9 percent and Argentina, 6.4 percent. Coffee exports accounted for 36.6 percent of all exports and totaled 14,830,064 bags of 132 lb. each.

MINERAL RESOURCES. Brazil's vast mineral resources are among her least developed assets. The most important are coal (estimated reserves of 5,000 million tons; estimated 1947 production 1,996,000 metric tons) and iron ore, found chiefly in Minas Gerais (1946 output, 582,516 metric tons). Other important minerals, with estimated 1946 production, are manganese ore, 149,100 metric tons; gold (1947), 135,000 troy ounces; diamonds, 325,000 carats; bauxite, 1,200 metric tons; tungsten, 2,100 metric tons; quartz crystals; uranium; chrome ore; graphite; petroleum and titanium.

FORESTS AND FISHERIES. More than half of Brazil's area is forested, but the extensive resources are relatively undeveloped. The largest single forest commodities are timber, chiefly pine from the southern states, and the wax of the carnauba palm, used for insulation and phonograph records and produced commercially only in Brazil. Rubber production, mostly in the Amazon basin, was estimated in 1946 at 24,908 metric tons, but it has not developed as extensively as was once expected. Other forest products are Brazil nuts, yerba maté (Paraguay tea), medicinal plants, and vegetable oils. There are vast fishing banks and grounds in the rivers and along the coast, with some 2,500 known species of fish.

COMMUNICATIONS. Coastwise and river steamers are the main links between north and south Brazil, especially within the Amazon basin where inland waterways are the only means of land communication. Navigable waterways total 26,713 miles. Coastwise traffic is restricted to Brazilian ships, but the Amazon is open to all ships.

Railway mileage in 1948 was about

22,000, mostly located south of Recife. Railway development has been hampered by natural obstacles, especially by coastal mountains, but extensive government and private building is under way. Highways total 38,000 miles, and common roads about 124,000 miles. In 1946, 17 air lines serving Brazil carried 514,000 passengers. The government air force operates mail schedules over domestic routes that are commercially unprofitable.

FINANCE. The 1948 budget estimated expenditures at 14,596,041,044 cruzeiros and revenue at 14,597,320,000 cruzeiros. The national debt Dec. 31, 1946, was 16,617,000,000 cruzeiros. American direct investments in 1944 were \$240,000,000; British investments Dec. 31, 1947, an estimated £213,355,744. Income and consumption taxes are the government's chief sources of revenue.

TOPOGRAPHY. Brazil covers about three-sevenths of South America, extends 2,965 miles north-south, 2,691 miles east-west, and borders every South American state except Chile and Ecuador. Its area would more than blanket that of the U. S.

There are two principal physical divisions of the Brazilian surface. The lowlands are made up of the heavily forested tropical river basin of the Amazon, the world's largest drainage area; and the less heavily forested basin of the Plata to the south. The intermediate highland is a vast plateau, 1,000 to 3,000 feet above sea level, traversed by several low mountain ranges, and extending almost from the seacoast to the Bolivian frontier and south to the plains of Rio Grande do Sul. The Central plateau comprises more than half of the country and, with the narrow coastal plain, supports 90 percent of the population. In the northeast are undeveloped highlands.

More than a third of Brazil is drained by the Amazon and its more than 200 tributaries. The Amazon is navigable for ocean steamers to Iquitos, Peru, 2,300 miles upstream. Southern Brazil is drained by the Plata system—the Paraguay, Uruguay and Paraná Rivers. The most important stream entirely within Brazil is the São Francisco, navigable for a thousand miles but broken near its mouth by the 260-foot Paulo Affonso Falls, with estimated potential 1,000,000 horsepower.

CLIMATE. Brazil is almost wholly in the torrid zone, but such factors as altitude, prevailing winds, rainfall and distance from the sea combine to vary the climate from tropical to temperate. Manaus on the Amazon has an average temperature of 80.9° and annual rainfall of 71.65 inches. The corresponding figures for Rio de Janeiro are 72.5° and 44 inches. February is usually the warmest month in Rio de Janeiro. In much of the Amazon basin, rainfall averages 80 inches; in a few areas, more than 100 inches.

BRITISH COMMONWEALTH OF NATIONS

Europe

Political subdivision	Area (sq. mi.)	Population
United Kingdom	93,371	50,027,000 ⁷
Channel Islands	75	79,000 ⁶
Isle of Man	221	50,829 ⁹
Gibraltar	2	20,339 ⁹
Malta	122	303,998 ⁷

Africa

Anglo-Egyptian Sudan	967,500	7,547,500 ⁷
Basutoland	11,716	590,000 ⁹
Bechuanaland	275,000	284,000 ⁹
Gambia	4,074	225,358 ⁷
Gold Coast (including Togoland)	91,843	4,473,942 ⁸
Kenya	224,960	4,209,300 ⁸
Mauritius and dependencies	807	438,703 ⁷
Nigeria (including British Cameroons)	372,674	23,000,000 ⁷
Northern Rhodesia	290,323	1,729,000 ⁷
Nyasaland	36,829	2,231,000 ⁶
St. Helena	126	5,040 ⁶
Seychelles	156	34,632 ⁷
Sierra Leone	27,925	2,000,000 ⁹
Somaliland	67,936	700,000 ⁴
Southern Rhodesia	150,333	1,916,000 ⁷
South-West Africa	317,725	361,075 ⁶
Swaziland	6,705	186,880 ⁶
Tanganyika Territory	342,706	5,728,400 ⁸
Uganda	80,301	4,012,200 ⁸
Union of South Africa	472,494	11,391,949 ⁷
Zanzibar and Pemba	1,020	250,000 ⁷

America

Bahamas	4,404	68,846 ⁹
Barbados	166	195,398 ⁷
Bermudas	19	35,560 ⁷
British Guiana	89,480	375,819 ⁶
British Honduras	8,598	59,149 ⁶
Canada	3,466,882	12,883,000 ⁸
Falkland Islands and dependencies	7,681	2,804 ⁹
Jamaica and dependencies	4,722	1,289,051 ⁵
Leeward Islands	422.5	108,812 ⁶
Newfoundland and Labrador	152,734	321,101 ⁵
Trinidad and Tobago	1,978	586,700 ⁷
Windward Islands	821	282,252 ⁶

Asia

Aden colony	80	86,309 ⁶
Aden protectorate	112,000	600,000 ⁹
Bahrain Islands	213	89,970 ¹
Borneo:		
State of North Borneo	29,347	335,379 ⁷
Brunei	2,226	41,000 ⁶
Sarawak	50,000	546,361 ⁷
Ceylon	25,332	7,023,000 ⁸
Cyprus	3,572	460,000 ⁷

Asia—(cont.)

Political subdivision	Area (sq. mi.)	Population
Hong Kong	391	1,072,000 ⁹
India, Dominion of	1,140,000	320,000,000 ⁷
Malaya:		
Malayan Federation	51,866	4,875,758 ⁷
Singapore and dependencies	282	940,713 ⁷
Pakistan	361,000	70,000,000 ⁷

Oceania

Australia, Commonwealth of	2,974,581	7,580,820 ⁷
Fiji	7,083	269,274 ⁷
Gilbert and Ellice Islands	312	35,298 ⁷
Nauru	8	2,383 ⁷
New Guinea, Territory of	93,000	804,000 ⁸
New Hebrides	5,700	48,815 ⁵
New Zealand	103,416	1,802,623 ⁷
Norfolk Island	13	938 ⁶
Papua (British New Guinea)	90,540	338,822 ⁷
Solomon Islands	11,458	94,865 ⁷
Tonga		
(Friendly Islands)	250	40,668 ⁷
Western Samoa	1,133	72,936 ⁸

(Note: Each population figure is followed by superior number denoting the year of estimate: ⁸ for 1948, ⁷ for 1947, ⁶ for 1946, ⁵ for 1945, ⁴ for 1944, ³ for 1943, ² for 1942, ¹ for 1941, ⁰ for 1940, ⁹ for 1939.)

EUROPE

United Kingdom of Great Britain and Northern Ireland

Area: 93,371 square miles (excluding Channel Islands and Isle of Man).

Population (est. Dec. 31, 1947): 50,027,000* (English, Scotch, Welsh, Irish).

Density per square mile: 535.8.*

Ruler: King George VI.

Prime Minister: Clement R. Attlee.

Principal cities (est. 1947): London (Greater), 8,244,370 (capital); Glasgow, 1,050,000† (seaport, shipbuilding); Birmingham, 1,020,500† (iron and steel); Liverpool, 751,898 (seaport); Manchester, 668,660† (textiles); Sheffield, 476,360† (steel, cutlery); Leeds, 481,570† (wholesale clothing); Edinburgh, 472,800 (capital, Scotland).

Monetary unit: Pound sterling.

Language: English, Welsh, Gaelic.

Religion: Church of England (established church); Church of Wales (disestablished); Church of Scotland (established church—Presbyterian); Church of Ireland (disestablished); Roman Catholic; Methodist; Congregational; Baptist; Jewish.

*Including armed forces. †Estimated 1945.

‡Estimated 1946.

HISTORY. Britain in 1948 moved into its fourth year under the Labour regime with great chunks of empire—India, Burma, Ceylon—gone and its position as a world power definitely secondary to that of the U. S. and the Soviet Union. At home, with the nationalization of transport, coal, electric power, civil aviation and the Bank of England completed, the Labour party led a drive for greater "austerity" in order to raise the level of industrial production and foreign trade upon which the islands' very existence depends.

The history of Britain is obscure until the Roman invasions of the 1st century B.C. brought the islands into contact with the continent. When the Roman legions withdrew in the 4th century A.D., Britain fell easy prey to the invading hordes of Angles, Saxons and Jutes from Scandinavia and the Low Countries. Seven large kingdoms were established, and the original Britons were forced into Wales and Scotland. It was not until the 11th century that the country finally became united under the Danish King Canute. Following the death of Edward the Confessor (1066), a dispute as to the succession arose, and William Duke of Normandy invaded England, defeating the Saxon noble, Harold II, at the Battle of Hastings (1066). The Norman conquest was accompanied by the introduction of Norman law and feudalism, changing the customs of England.

The reign of Henry II (1154-89), first of the Plantagenets, saw an increasing centralization of royal power at the expense of the nobles, but in 1215 John (1199-1216) was forced to sign the Magna Carta, which awarded the people, especially the nobles, certain basic rights. Edward I (1272-1307) continued the conquest of Ireland, reduced Wales to subjection, and made some gains in Scotland. In 1314, however, English forces led by Edward II were ousted from Scotland after the battle of Bannockburn. The late 13th and early 14th centuries saw the development of a separate House of Commons with tax-raising powers.

Edward III's claim to the throne of France led to the Hundred Years' War (1338-1453), which ended with the loss of almost all the large English territory in France. In England the great poverty and discontent caused by the war was intensified by the Black Death, a plague which reduced the population by about one-third. The Wars of the Roses (1455-85), a struggle for the throne between the House of York and the House of Lancaster, were ended by the victory of Henry Tudor (Henry VII) at Bosworth Field (1485).

During the reign of Henry VIII (1509-47), the Church in England asserted its independence from the Roman Catholic Church. Under Edward VI and Mary, the two extremes of religious fanaticism were reached and it remained for Henry's

daughter, Elizabeth (1558-1603), to settle the Church of England on a moderate basis. In 1588 the Spanish Armada, a fleet sent out by Catholic King Philip II of Spain, was defeated by the English and destroyed during a storm. It was during Elizabeth's reign that England became a world power.

Elizabeth's heir was of the house of Stuart—James VI of Scotland—who joined the two crowns as James I (1603-25). The Stuart kings incurred large debts and were forced either to depend on Parliament for taxes or to raise money by illegal means. In 1642 war broke out between Charles I and a large portion of the Parliament; Charles was defeated and executed in 1649, and the monarchy was then abolished. The Puritan Commonwealth endured for ten years, but after the death (1658) of Oliver Cromwell, the Lord Protector, the government fell to pieces and Charles II was restored to the throne in 1660. The struggle between the King and Parliament continued, but Charles II knew when to compromise. His brother James II (1685-88) possessed none of his ability and was ousted by the Revolution of 1688, which confirmed the predominant position of Parliament. James' daughter, Mary, and her husband, William of Orange, now ruled jointly.

The reign of Queen Anne (1702-14) was marked by the Duke of Marlborough's victories over France at Blenheim, Oudenarde and Malplaquet in the War of the Spanish Succession. England and Scotland meanwhile were joined together by the Act of Union (1707). Upon the death of Anne, the distant claims of the elector of Hanover were recognized, and he became King of England as George I.

The 18th century was a period of gradual growth and change. At home the unwillingness of the Hanoverian kings to rule resulted in the formation by the King's ministers of a cabinet, headed by a prime minister, which directed all public business. Abroad the constant wars with France resulted in expansion of the British Empire all over the globe, particularly in North America and India. This imperial growth was checked by the revolt of the American colonies (1775-81).

The age-long struggle with France broke out again in 1793, and during the lengthy Napoleonic Wars, which ended at Waterloo (1815), England was pitted at one time against almost all of Europe.

The Victorian era, named after Queen Victoria (1837-1901), saw the growth of a democratic system of government which had begun with the Reform Bill of 1832. The two important wars in Victoria's reign were the Crimean War against Russia (1853-56) and the Boer War (1899-1902). The latter was the result of England's imperialist expansion in South Africa and was

accompanied by enormous extension of her sway throughout Africa.

The reign of Edward VII (1901-10) was marked by increasing uneasiness at home and abroad. Within four years after the accession of George V (1910), England entered World War I when Germany invaded Belgium. The nation was led by coalition cabinets headed first by Herbert Asquith and then (Dec., 1916) by the Welsh statesman, David Lloyd George. The years after the war were marked by labor unrest which culminated in the general strike of 1926. A Labour ministry formed early in 1924 by Ramsay MacDonald fell in October of that year. In 1929 a second Labour government

was formed, but the world economic depression forced a change in 1931, and a national government was formed composed chiefly of Conservative members, although MacDonald remained prime minister until 1935. King Edward VIII succeeded to the throne in 1936 on his father's death but abdicated eleven months later (in order to marry an American, Wallis Warfield Simpson, whose second divorce was then pending) in favor of his brother, who became King George VI.

The efforts of Prime Minister Neville Chamberlain to meet by peaceful means the rising tide of Nazism in Germany failed with the German invasion of Poland

Rulers of England

Anglo-Saxons¹

Name	Born	Ruled
Alfred the Great	849	871-899
Edward the Elder	c. 870	c. 899-925
Athelstan	895	925-939
Edmund I	921	939-946
Edred	c. 925	946-955
Edwy the Fair	c. 943	955-959
Edgar the Peaceful	943	959-975
Edward the Martyr	c. 962	975-979
Ethelred the Redeless	968	979-1016
Edmund II Ironside	c. 993	1016-1016

Danes

Canute	995	1016-1035
Harold I Harefoot	c. 1016	1035-1040
Hardicanute	c. 1018	1040-1042

Saxons

Edward the Confessor	c. 1004	1042-1066
Harold II	c. 1020	1066-1066

Normans

William I the Conqueror	1027	1066-1087
William II Rufus	c. 1056	1087-1100
Henry I	1068	1100-1135
Stephen	c. 1100	1135-1154

Plantagenets

Henry II	1133	1154-1189
Richard I Coeur de Lion	1157	1189-1199
John	1167	1199-1216
Henry III	1207	1216-1272
Edward I Longshanks	1239	1272-1307
Edward II	1284	1307-1327
Edward III	1312	1327-1377
Richard II	1367	1377-1399

House of Lancaster

Henry IV	1366	1399-1413
Henry V	1387	1413-1422
Henry VI	1421	1422-1461
		& 1470-1471

House of York

Name	Born	Ruled
Edward IV	1442	1461-1470 & 1471-1483
Edward V	1470	1483-1483
Richard III	1452	1483-1485

House of Tudor

Henry VII	1457	1485-1509
Henry VIII	1491	1509-1547
Edward VI	1537	1547-1553
Jane (Lady Jane Grey)	1537	1553-1553
Mary I	1516	1553-1558
Elizabeth	1533	1558-1603

House of Stuart

James I ²	1566	1603-1625
Charles I	1600	1625-1649

Commonwealth

Council of State	—	1649-1653
Oliver Cromwell	1599	1653-1658
Richard Cromwell	1626	1658-1659

House of Stuart Restored

Charles II	1630	1680-1685
James II	1633	1685-1688
William III ³	1650	1689-1702
Mary II ³	1662	1689-1694
Anne	1665	1702-1714

House of Hanover

George I	1660	1714-1727
George II	1683	1727-1760
George III	1738	1760-1820
George IV	1762	1820-1830
William IV	1765	1830-1837
Victoria	1819	1837-1901

House of Saxe-Coburg

Edward VII	1841	1901-1910
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House of Windsor

George V	1865	1910-1936
Edward VIII	1894	1936-1936
George VI	1895	1936-

¹Dates for Anglo-Saxon kings are still subjects of controversy.

²Ruled in Scotland as James VI (1567-1625).

³Joint rulers (1689-1694).

(Sept. 1, 1939), which was followed by England's entry into World War II (Sept. 3, 1939). Serious Allied reverses in the spring of 1940 led to Chamberlain's resignation and the formation of another coalition war cabinet by Conservative leader Winston Churchill, who led England through most of World War II. Churchill resigned as the coalition leader shortly after V-E Day, but then formed a "caretaker" government which remained in office until after the parliamentary elections of July 5, 1945, in which the Labour party won an overwhelming victory. The government formed by Clement R. Attlee on July 26 embarked on a moderate socialistic program.

AREA AND POPULATION OF MAJOR SUBDIVISIONS* (Dec. 31, 1947)

Subdivision	Area	Population
England	50,870	43,534,000
Wales	7,469	
Scotland	29,794	5,140,000
Northern Ireland	5,238	1,353,000

*Not including Channel Islands and Isle of Man.

RULER. King George VI, born December 14, 1895, second son of King George V and Queen Mary, succeeded to the throne on the abdication of his brother, King Edward VIII, December 11, 1936; married April 26, 1923, to Lady Elizabeth Bowes-Lyon (born Aug. 4, 1900). Children: (1) Princess Elizabeth Alexandra Mary, born April 21, 1926 (heiress presumptive; married Nov. 20, 1947, to Prince Philip, Duke of Edinburgh, born June 21, 1921); (2) Princess Margaret Rose, born August 21, 1930. The King's living brothers are Prince Edward Albert, Duke of Windsor (formerly King Edward VIII), born June 23, 1894, and Prince Henry William, Duke of Gloucester, born March 31, 1900.

NATIONAL GOVERNMENT. The United Kingdom is a constitutional monarchy, with a king and a Parliament consisting of two houses: the House of Lords with about 670 hereditary peers, 26 spiritual peers, 16 Scottish representative peers, a number of Irish representative peers (vacancies are no longer filled), and a few life peers who have held high judicial office; and the House of Commons, numbering temporarily 640 members elected by practically universal suffrage. Supreme legislative power is vested in Parliament, which holds office for five years unless sooner dissolved. The executive power of the Crown is exercised by the Cabinet, headed by the prime minister. The latter, normally the head of the party commanding a majority in the House of Commons, is appointed by the sovereign, with whose consent he in turn appoints the rest of the Cabinet. All ministers must be members of one or the other house of Parliament; they are individually and collectively responsible to

the Crown, the prime minister and Parliament. The Cabinet proposes bills and arranges the business of Parliament but it depends entirely on the votes of confidence in Commons. By an act passed in 1911, the lords cannot hold up "money" bills, but they can delay other bills for a period of two years.

By the Act of Union (1707) the Scottish parliament was assimilated with that of England, and Scotland is now represented in Commons by 74 members. The Secretary of State for Scotland, a member of the Cabinet, is responsible for the administration of Scottish affairs.

PARTY STANDING IN HOUSE OF COMMONS

Party	Popular vote (1945)	Seats (1947)
Labour	11,968,362	393
Conservative	9,075,406	198
Liberal National	759,883	13
Liberal	2,241,203	12
National	158,917	2
Independent Labour	46,679	3
Communist	102,780	2
Irish Nationalist	148,078	2
Common Wealth	110,634	1
Independents	484,192*	14
		640

*Including 83,181 scattered votes.

The members of the British Cabinet are: Clement R. Attlee (Prime Minister, First Lord of the Treasury), Herbert Morrison (Lord President of the Council), Ernest Bevin (Secretary of State for Foreign Affairs), Sir Stafford Cripps (Chancellor of the Exchequer and Minister for Economic Affairs), Albert V. Alexander (Minister of Defense), Viscount Jowitt (Lord Chancellor), Viscount Addison (Lord Privy Seal), James Chuter Ede (Secretary of State for the Home Department), Arthur Creech Jones (Secretary of State for the Colonies), Philip Noel-Baker (Secretary of State for Commonwealth Relations), Arthur Woodburn (Secretary of State for Scotland), George A. Isaacs (Minister of Labour and National Service), Aneurin Bevan (Minister of Health), Thomas Williams (Minister of Agriculture and Fisheries), George Tomlinson (Minister of Education), Harold Wilson (President of the Board of Trade), Hugh Dalton (Chancellor of the Duchy of Lancaster) and Lord Pakenham (Minister of Civil Aviation).

LOCAL GOVERNMENT. England and Wales are divided into 62 administrative counties, including the county of London, and 83 county boroughs. The counties are administered by the justices and by popularly elected county councils. All incorporated towns are administered by a municipal corporation consisting of the mayor, aldermen and burgesses. Local government in Scotland is comparable to that in England and Wales.

JUDICIARY. The ultimate British court of appeal is the House of Lords; the final court of appeal for certain of the Dominions is the Judicial Committee of the Privy Council. Below the House of Lords on the civil side is the High Court of Judicature, divided into two parts, the Court of Appeal, and the High Court of Justice. On the criminal side is the Court of Criminal Appeal, which is the court of last resort barring the rare allowance of an appeal to the Lords. Actually these superior courts hear only a small fraction of the cases, and most of the trials are held in a complicated system of inferior courts, exercising original jurisdiction. The Lord Chancellor, Lord Chief Justice, Lords of Appeal in Ordinary (law members of the House of Lords), and Lord Justices of Appeal are appointed by the Prime Minister.

DEFENSE. Compulsory military service, introduced in May, 1939, is still in effect, and will continue until 1954 under the terms of the National Defense Act approved July 18, 1947. This act makes one year's national service compulsory for men between 18 and 26. The armed forces are comprised of three separate services—the Army, the Royal Navy and the Royal Air Force. The Prime Minister retains supreme responsibility for defense, but the Minister of Defense has coordinating and executive duties.

Service ministers are no longer Cabinet members but continue to be members of the Defense Committee headed by the Prime Minister with the Minister of Defense as deputy chairman; this committee is responsible to the Cabinet both for the review of current strategy and for coordinating departmental action in preparation for war.

Budget estimates for the fiscal year 1948-49 follow:

	Estimate	Strength*
Navy	£153,000,000	167,000
Army	305,000,000	850,000
Air	173,000,000	325,000

*Maximum during period.

Control of the land forces is exercised by the Army Council, headed by the Secretary of State for War. Its members include the Chief of the Imperial General Staff, the Adjutant General and Quartermaster General.

The Royal Navy is controlled by the Board of Admiralty, headed by the First Lord of the Admiralty, who is responsible to Parliament. Other members include the First Sea Lord and Chief of Naval Staff. At the end of 1947 the Royal Navy had in commission 4 battleships, 3 fleet carriers, 5 light fleet carriers, 17 cruisers, 56 destroyers, 41 frigates and 34 submarines. In reserve were 1 battleship, 3 fleet carriers, 1 light fleet carrier, 12 cruisers, 63 destroyers,

136 frigates and about 40 submarines. Twelve fleet carriers and several other smaller craft were under construction. Naval losses during World War II totaled 2,831 vessels, including 3 battleships, 2 battle cruisers, 5 fleet carriers, 3 auxiliary carriers, 23 cruisers, 139 destroyers and 76 submarines.

Control of the Royal Air Force is vested in an Air Council analogous to the Army Council and headed by the Secretary of State for Air. The Fleet Air Arm was transferred to the Royal Navy in 1937.

The total strength of the armed forces on Aug. 31, 1939, was 681,000. Between that date and June 30, 1945, another 5,215,000 men were inducted. Of the total of 5,896,000, 923,000 served in the Royal Navy, 3,788,000 in the Army and 1,185,000 in the Royal Air Force. The Women's Auxiliary Forces added 619,000 to their 1939 strength of 21,000.

Research and development in the field of atomic energy and weapons is the responsibility of the Ministry of Supply.

BRITISH CASUALTIES OF WORLD WAR II

Source: White Paper, June 6, 1946.

	Navy	Army	R.A.F.	Total
Killed	50,758	144,079	69,606	264,443
Wounded	14,663	239,575	22,839	277,077
Prisoner	7,401	152,076	13,115	172,592
Missing	820	33,771	6,736	41,327
Total	73,642	569,501	112,296	755,439

EDUCATION. The school system in England and Wales has undergone considerable change since enactment of the Education Act of 1944. This measure makes primary and secondary training available for all children at public expense, with the secondary stage starting at the age of 11. The school-leaving age was raised from 14 to 15 on April 1, 1947. Statistics for the United Kingdom during the school year 1945-46 are as follows:

Primary (up to 11 years)—England and Wales: departments maintained and assisted by local authorities, 23,991; scholars, 3,735,680; Scotland: schools, 2,087; scholars, 375,757. Secondary—England and Wales: schools, 4,366; scholars, 1,268,531; direct grant secondary schools, 189; scholars, 85,372; Scotland: schools, 983; scholars, 354,286.

In 1946-47 English universities had 50,125 students, the University of Wales 3,394, and the four Scottish universities 14,282.

AGRICULTURE. Agriculture remains one of Britain's chief industries, employing more than 1,000,000 persons. In 1946, land under cultivation in England, Wales and Scotland amounted to 19,000,000 acres; permanent grassland totaled 12,000,000 acres. In Scotland more than two-thirds of the land used for agriculture is un-

cultivated rough grazings, while over two-thirds of the cultivated area is arable land; in England and Wales three-fifths of the cultivated land is under permanent grass and only one-sixth of the total agricultural land is rough grazings.

LEADING AGRICULTURAL PRODUCTS, 1939 and 1947 (in thousands)

	1939		1947	
	Acres	Short tons	Acres	Short tons
Wheat	1,766	1,842	2,162	1,884
Barley	1,013	999	2,059	1,832
Oats	2,427	2,243	3,309	2,755
Rye	14	11	36	24
Potatoes	704	5,854	1,330	9,029

Livestock (June 30, 1947) included 8,633,000 cattle, 16,206,000 sheep, 48,977,000 poultry and 1,294,000 hogs. Cattle occupy a predominant position in British agriculture, accounting for about 40 percent of the total farm output. Production of cheese (1947) was 18,600 short tons, butter 7,600, beef and veal 564,900, mutton and lamb 128,100, pork, bacon and ham 82,100, and wool 36,200.

INDUSTRY. Great Britain is second only to the United States among the industrial nations of the world. The most important manufacture is heavy goods such as machinery, tools, bridges and locomotives; industry is concentrated in the north and Midlands of England. Sheffield is the center of the steel industry, while the china industry is concentrated in the Midlands. The cotton industry is centered in Lancashire; Liverpool, Manchester, Oldham, Preston and Bolton are the main manufacturing towns. The wool industry, England's oldest large trade, is located just east of the cotton towns, at Leeds, Bradford and Hull in Yorkshire. An important industrial region is the central Lowlands of Scotland, where woollens, silks, linens, cottons, lace, glass, paper, steel and pig iron are produced. Important shipyards are located along the coast. The 393 vessels of 1,202,024 tons launched in 1947 represented 56.9 percent of the world total. On June 30, 1948, 457 vessels of 2,243,703 tons were under construction in the United Kingdom. Steel production in 1947 was 13,978,000 short tons; pig iron (1946) 8,532,000 short tons.

Britain's last industrial census was taken in 1935, when the total value of manufactured products was \$13,907,300,000. The principal industries, in order of value of output in that year, were as follows: food, beverages and tobacco; engineering and transportation; textiles; metals; wood and paper products; chemicals; clothing.

TRADE. The United Kingdom's economic prosperity is dependent on its foreign trade.

OVERSEAS TRADE

	(Value in millions of pounds sterling)		
	Imports	Exports	Re-exports
1938	919.5	470.8	61.5
1945	1,103.7	399.3	51.0
1946	1,297.7	911.7	50.3
1947	1,787.5	1,737.1	59.2
1948*	1,025.7	743.6	31.2

*First six months.

DISTRIBUTION OF TRADE, 1938-47 (in millions of pounds sterling)

Chief Destination of Exports			
	1938	1946	1947
South Africa	39.5	75.3	91.8
India	33.8	79.7	91.6
Australia	38.2	55.2	71.8
Elre	20.3	39.6	55.9
United States	20.5	35.5	47.9
Canada	22.5	32.6	43.4

Chief Sources of Imports			
	1938	1946	1947
United States	118.0	229.6	294.9
Canada	78.7	195.9	230.3
Argentina	38.5	66.7	130.7
Australia	71.8	67.4	97.1
India	49.9	69.0	94.4
New Zealand	46.9	74.4	89.6

LEADING EXPORTS AND IMPORTS (in millions of pounds sterling)

Exports		
	1938	1947
Machinery	57.9	180.5
Vehicles, including ships and aircraft	44.5	168.1
Cotton yarns and manufactures	49.7	77.7
Chemicals, drugs, dyes	22.3	67.4
Iron and steel and manufactures	41.7	84.3
Imports		
	1938	1947
Meat	90.7	147.3
Grain and flour	74.4	141.7
Dairy products	80.0	124.6
Oilseeds and nuts	30.6	118.8
Wood and timber	42.9	107.1

COMMUNICATIONS. The merchant marine on June 30, 1947, totaled 6,061 ships with a gross tonnage of 17,847,897—21.37 percent of the world total and second only to the U. S. merchant fleet. Losses during World War II totaled 2,426 vessels of 11,331,933 gross tons.

Nationalization of the railway and canal systems in Great Britain became effective Jan. 1, 1948, and they are now operated by the government's Transport Commission. Railway mileage in the United Kingdom is 20,761; in 1946, 1,221,600,000 passengers and 285,373,900 short tons of freight were carried. The total length of public highways is 180,670 miles, of which 154,694 are in England and Wales and 25,976 in Scotland. In May 1947 licensed motor vehicles numbered 3,292,000, of which 1,859,000 were cars. Radio receiving set licenses were 10,782,000; television sets 18,350. Telephones were more than 5,000,000 in 1948.

British air services throughout the world are nationalized under the Minister of Civil Aviation. Service is supplied by three public corporations—British Overseas Airways (BOAC), British European Airways, and British South American Airways. In 1946, they flew respectively 23,912,227, 1,873,818, and 2,138,000 air miles.

FINANCE. Actual revenue for the fiscal year 1947-48 amounted to £3,844,859,041, as against original budget estimates of £3,451,000,000. Actual expenditure was £3,187,104,303, as against estimates of £3,181,367,000, thus leaving a record surplus of £657,754,738. Notes in circulation on July 21, 1948, totaled £1,276,469,214. The gross national debt on July 17, 1948, was £25,718,000,000 (March 31, 1948: £25,761,000,000; March 31, 1940: £9,083,000,000; March 31, 1935: £7,902,000,000).

ESTIMATED REVENUE AND

EXPENDITURE 1948-49

Estimated Revenue

Income tax	£1,309,150,000
Surtax	90,000,000
Death duties	160,000,000
Stamps	55,000,000
Profits tax and excess profits tax	250,000,000
Other inland revenue duties	1,000,000
Special contribution	50,000,000
Total inland revenue	£1,915,150,000
Customs	820,600,000
Excise	726,550,000
Total customs and excise	1,547,150,000
Motor vehicle duties	50,000,000
Total receipts from taxes	3,512,300,000
Surplus war stores	102,000,000
Surplus receipts from certain trading services	57,000,000
Wireless licenses	11,000,000
Crown lands	1,000,000
Receipts from sundry loans	14,000,000
Miscellaneous	68,000,000
Total estimated revenue	3,765,300,000

Estimated Expenditure

Consolidated fund:	
Interest and management of national debt	£500,000,000
Payments to Northern Ireland Exchequer	26,000,000
Misc. consolidated fund expenditures	8,000,000
Total consolidated fund	534,000,000

Supply services:

Army	305,000,000
Navy	153,000,000
Air	173,000,000
Ministry of Supply	61,000,000
Ministry of Defense	632,000
Total supply services	692,632,000

Civil service:

Central government and finance	11,415,000
Foreign and imperial	38,459,000
Home department, law and justice	40,546,000
Education and broadcasting	214,896,000
Health, housing, town planning, labor and nat'l insurance	540,697,000
Trade industry and transport	168,315,000
Works, stationery, etc.	78,324,000
Pensions	94,128,000
Contributions to local revenues	56,717,000
Supply, food and miscellaneous	465,116,000
Total civil service	1,708,613,000

Post office (excess over revenue)	10,877,000
Tax collection	29,557,000
Total estimated expenditure	2,975,679,000
Surplus	789,621,000
Grand total	3,765,300,000

TOPOGRAPHY AND HYDROGRAPHY. The United Kingdom, consisting of England, Wales, Scotland and Northern Ireland, is about one-third the size of Texas. England, in the southeast part of the British Isles, is separated from Scotland on the north by the granite Cheviot Hills; from them the Pennine chain of uplands extends south through the center of England, reaching its highest point in the Lake district in the northwest. To the west along the border of Wales—a land of steep hills and valleys—are the Cambrian Mountains while the Cotswolds, a range of hills in Gloucestershire, extend into the surrounding shires. The remainder of England is plain land, though not necessarily flat, with the rocky sand-topped moors in the southwest, the rolling downs in the south and southeast and the reclaimed marshes of the low-lying Fens in the east central districts. Scotland is divided into three physical regions—the Highlands, the Central Lowlands, containing two-thirds of the population, and the Southern Uplands. The western Highland coast is intersected

throughout by long narrow sea-lochs or fiords. Scotland also includes the Outer and Inner Hebrides and other islands off the west coast, and the Orkney and Shetland Islands off the north coast.

Wales is generally hilly; the Snowdon range in the northern part culminates in Mt. Snowdon (3,560 ft.), highest in either England or Wales.

In addition to the numerous inlets and bays of the coast, England has a group of lakes in the northwest which includes Windermere, Coniston, Derwentwater, Ullswater and Grasmere. Important rivers flowing into the North Sea are the Thames, Humber, Tees and Tyne. In the west are the Severn and the Wye, which empty into the Bristol Channel and are navigable, as are the Mersey and Ribble. Scotland has many picturesque lakes; its most important river is the Clyde.

CLIMATE. Although Great Britain lies in the same approximate latitude as Labrador, its climate is tempered by the westerly winds blowing off the warm Gulf Stream. The sea winds also prevent excessive summer heat. Rainfall is abundant, especially in the early fall. London's famed "pea-soup" fogs occur most frequently in November and March. It has been estimated that clouds, fogs or mists obscure the sun for approximately two-thirds of the daylight hours.

The mean annual temperature of England and Wales is about 50°; the west coast is somewhat warmer than the east. January is the coldest month (average about 40°) and July the hottest (about 61.5°). Highest July temperatures usually occur around London, where the mean is somewhat above 64°. Coldest months in the capital are December (about 38°) and January (about 39°). The mean annual rainfall in London is 23½ inches.

North of Birmingham, the summers are cool, and in Edinburgh the mean temperature in July is usually below 60° (58.7° in 1947). Rainfall is less than in London.

MINERALS. Great Britain's most important mineral resource is coal, which was responsible to a large extent for British industrial supremacy during the late 18th and the 19th centuries. The coal mines were nationalized in 1946. Reserves have been variously estimated at from 150,000 million to 200,000 million tons. Prior to World War II, coal was exported in declining amounts to the continent, mainly to France, Sweden, Denmark and Italy. Since the war, however, exports have been negligible, and Britain has been hard put to meet her own minimum domestic requirements. Mineworkers numbered approximately 692,000 when the new National Coal Board took over 1,647 mines in 1947.

Most of the British iron ore is produced in England, especially in Cumberland,

Lancashire and Staffordshire. Tin ore and copper are obtained almost exclusively from Cornwall, while lead comes mainly from Flint, Durham and Derbyshire. Zinc occurs mainly in North Wales, the north of England, the Isle of Man and the county of Dumfries in Scotland. The whole British supply of china clay (kaolin)—of great importance in the ceramic, papermaking, bleaching and chemical industries—comes from Cornwall. Petroleum production is negligible, but oil shale exists in large quantities.

MAJOR MINERALS, 1938 and 1947

(in thousands of short tons)

	1938	1947
Coal	253,518	214,805
Iron ore	13,269	12,172
Aluminum	25.8	32.1
Superphosphates	476	1,073.8

The most important potential sources of water power are in the highlands of Scotland, North Wales and Cumberland. Electricity generated in England, Scotland and Wales averaged 3,197,000,000 kwh monthly during 1947. Gas manufacture averaged 1,168,000,000 cu. m. monthly in that year. Nationalization of the electric and gas industries became effective in 1948.

FORESTS, FISHERIES. Great Britain was once heavily forested, but centuries of timber cutting and clearing have denuded the country of the original forests. Woodland of all types approximates 3,000,000 acres, and barely 40 percent of Britain's surface is covered with timber. Consequently the nation is heavily dependent on imported timber.

Great Britain's sea fishing industry is among the most important in the world. The principal kinds of fish caught are herring, cod, haddock, plaice and hake, classed as wet fish, and, among shellfish, oysters, crabs and lobsters. The most important factor in the export trade is salted herring, which ordinarily represents about 70 percent of the total. The principal grounds frequented by British fishermen are the North Sea; off Iceland; the Faeroes; south of Ireland; west of Scotland; west of Ireland; the Irish Sea and English Channel. The catch of wet fish in 1947 was 1,086,200 short tons; about 40,000 men are regularly employed in the industry.

NORTHERN IRELAND

(Part of United Kingdom)

Area: 5,238 square miles.

Population (est. 1947): 1,353,000.

Density per square mile: 258.3.

Governor: Vice Admiral the Earl Granville.

Prime Minister: Sir Basil S. Brooke.

Principal cities (est. 1947): Belfast, 447,918 (capital); Londonderry, 48,987 (clothing).

Monetary unit: Pound sterling.

Language: English, Gaelic.

Religions (census 1947): Roman Catholic, 33.7%; Presbyterian, 31.4%; Church of Ireland, 26.9%; others, 8.0%.

Northern Ireland comprises the six predominantly Protestant counties of Antrim, Armagh, Down, Fermanagh, Londonderry and Tyrone (collectively known as Ulster), which form the northern part of the island of Ireland. The area is an integral part of the United Kingdom, but under the terms of the Government of Ireland Act (1920) it has a semi-autonomous government, which has steadfastly refused to reconsider a decision made in 1922 not to associate itself in any sort of union with the rest of Ireland.

The government has only limited powers for local purposes, and many matters are reserved to the central government at Westminster. Executive authority is vested in the Crown-appointed governor who is advised by a cabinet of eight ministers headed by the prime minister. The Parliament consists of the House of Commons of 52 members elected for 5-year terms, and the Senate of 26 members elected by the House of Commons. The general elections of June 14, 1945, returned 33 Unionists, 9 Nationalists, and 10 representatives of other groups to the House. The area is also represented by 13 members in the British Parliament at London.

Agriculture is the largest single industry; about two-thirds of the country is devoted to crops and pasture under a system of mixed farming. The leading crops include potatoes, oats and flax. In 1947 there were 931,175 cattle, 531,700 sheep and 333,410 hogs.

The two principal manufacturing industries are linen and shipbuilding, both centered in Belfast. The linen industry was established by Huguenot weavers who fled France after the revocation of the Edict of Nantes in 1685; linen and rayon exports in 1946 were valued at £22,000,000. On June 30, 1948, 25 vessels of 260,900 tons were under construction at Belfast.

Expenditures for the fiscal year 1947-48 were estimated at £32,838,000 and revenues at £53,073,000. Northern Ireland's "contribution" to the British treasury in 1946-47 was estimated at £22,500,000. Most of the taxes are collected by the United Kingdom government.

In 1945-46 there were 1,649 primary schools (up to 11 years) in Northern Ireland, with enrollment of 186,664, and 76 secondary schools with enrollment of 21,021. Students at the Queen's University (Belfast) in 1946-47 numbered 2,839.

The topography of Northern Ireland is somewhat similar to that of the rest of the island, with two ranges (Donegal and Sperrin) and an extensive plateau (An-

trim) in the northeastern part. Mineral resources are limited to deposits of basalt, clay, sandstone and granite. Fishing is an important industry, off the coast and in the numerous lakes and rivers which abound in salmon, eels and trout. Lough Neagh, covering about 153 square miles, is the largest lake in the British Isles.

The climate is comparable to that of the rest of the United Kingdom, although somewhat more equable. The highest mean summer temperature is about 59° in July, and the mean winter temperature rarely falls below 40°. Most of the comparatively light rainfall occurs in the autumn.

ISLE OF MAN

Lieutenant Governor: Air Vice Marshal Sir Geoffrey R. Bromet.

Located in the Irish Sea, equidistant from Scotland, Ireland and England, the Isle of Man is administered according to its own laws by a government composed of the Lieutenant governor (appointed by the Crown), a legislative council of 11 members, and a House of Keys of 24 elected members, one of the most ancient legislative assemblies in the world. All sitting together constitute the court of Tynwald, which controls revenue and has executive power. Acts of the British Parliament do not affect the island unless it is specifically named.

Agriculture and fishing are the principal industries. The island is a popular English summer resort.

CHANNEL ISLANDS

Lieutenant Governor of Jersey: Lt. Gen. Sir Arthur E. Grasset.

Lieutenant Governor of Guernsey: Lt. Gen. Sir Philip Neame.

This group of islands, lying in the English Channel off the northwest coast of France, is the only portion of the Duchy of Normandy belonging to the English Crown, to which it has been attached since the conquest of 1066. It was the only British possession occupied by Germany during World War II.

For purposes of government the islands are divided into Jersey (45 sq. mi.) and the bailiwick of Guernsey (24 sq. mi.), including Alderney (3 sq. mi.), Sark (2 sq. mi), Herm and Jethou. The islands are administered according to their own laws and customs by local governments headed by Crown-appointed lieutenant governors. Acts of Parliament in London are not binding on the islands unless they are specifically mentioned.

The two main sources of income for the population are agriculture, especially stock-raising, and the tourist trade. French is still the official language, although English is the main language of commerce and most government functions.

GIBRALTAR—Status: Colony.

Governor: Lt. Gen. Sir Kenneth Anderson.

Gibraltar, at the south end of the Iberian Peninsula, is a rocky promontory commanding the western entrance to the Mediterranean. Aside from its strategic importance, it is also a free port, naval base and coaling station. It was captured by the Arabs crossing from Africa into Spain in A.D. 711. In the 15th century it passed to the Moorish ruler of Granada and later became Spanish. It was captured by an Anglo-Dutch force in 1704 during the War of the Spanish Succession and passed to Britain by the Treaty of Utrecht in 1713. Most of the inhabitants are of Spanish, Italian and Maltese descent. There are no important industries. Gibraltar's climate is equable, with summer temperatures averaging about 84° maximum. Mean annual temperature is 64.4°.

MALTA—Status: Self-governing colony.

Capital: Valletta (population, 18,198).

Governor: Sir Francis C. R. Douglas.

Prime Minister: Dr. Paul Boffa.

Foreign trade (1947): exports £238,780; imports £14,389,732. **Chief exports:** potatoes, onions.

Agricultural products: potatoes, onions, cereals, fruits.

The Maltese islands lie between Europe and Africa, in the central channel linking the eastern and western Mediterranean. The inhabited islands are Malta (95 sq. mi.), Gozo (26 sq. mi.) and Comino (1 sq. mi.). The Knights of St. John (Malta), who obtained the islands from Charles V in 1530, reached their highest fame when they withstood an attack by superior Turkish forces in 1565. Napoleon seized the island in 1798, but the French forces were ousted by British troops in 1799, and British rule was confirmed by the Treaty of Paris (1814). The principal importance of Malta is its strategic location as a naval base; it was heavily attacked by German and Italian aircraft during World War II but was never invaded by the Axis. Most of the population are Maltese, speaking the Phoenician Maltese language, a tongue akin to Syriac and Arabic. The islands are densely populated (2,491 per sq. mi.) and are heavily dependent on imports of food-stuffs.

Under its 1947 constitution, Malta enjoys a measure of self-government. The locally-elected assembly has complete control over domestic affairs but British government retains control over matters dealing with defense and foreign affairs.

The climate is temperate and healthful. Annual mean temperature is 64.5°, with June-September the hottest months and December-February the coldest (56°). Rainfall is irregular.

AFRICA

ANGLO-EGYPTIAN SUDAN (See EGYPT).

BRITISH SOUTH AFRICAN PROTECTORATES.

High Commissioner: Sir Evelyn Baring.

The three British protectorates in southern Africa—Basutoland, Bechuanaland and Swaziland—are not part of the Union of South Africa, but are administered by a High Commissioner responsible to the Secretary of State for Commonwealth Relations in the British cabinet. He also holds the office of High Commissioner for the United Kingdom in the Union of South Africa.

BASUTOLAND—Status: Protectorate.

Capital: Maseru (population 3,383).

Resident Commissioner: A. D. Forsyth Thompson.

Foreign trade (1945): exports £502,269; imports £1,624,734. **Chief exports:** wool, mohair.

Agricultural products: corn, wheat, sorghum.

Basutoland is a mountainous enclave surrounded by the Union of South Africa and bounded by the Orange Free State, Cape Province and Natal. It was constituted a native state under British protection by a treaty signed with the native chief Moshesh in 1843. It was annexed to Cape Colony in 1871, but on Mar. 13, 1884, was restored to direct control by the Crown. The resident commissioner is advised by a council of 100, of whom 95 are nominated by the native chiefs who administer the affairs of their tribes.

The population is restricted almost entirely to the lowland strip in the west; the white population (1,434 by the last census, in 1936) consists solely of officials, missionaries, traders and a few labor agents for employers in the Union of South Africa. About 100,000 natives are regularly employed in the Union. Sheep raising is highly developed. Land is the common property of the nation, held in trust by the chiefs. There are no European farmers.

The climate is dry and variable; temperatures range from 11° to 93°. Rainfall also is variable, but is heaviest during the summer; it averages about 30 inches annually.

BECHUANALAND—Status: Protectorate.

Capital: Mafeking, in Cape Province (population 4,666).

Resident Commissioner: A. Sillery.

Foreign trade: included in South African customs union. **Chief export:** pastoral products.

Agricultural products: hides and skins, cattle, butter, millet, maize.

Minerals: gold and silver (1945 value: £95,200).

Bechuanaland lies in south central Africa, bounded on the south and southeast by the Union of South Africa, on the west by South-West Africa, on the north by

Angola and Northern Rhodesia and on the northeast by Southern Rhodesia. Its average elevation is 3,300 feet and the greater part is gently undulating. The area was placed under British protection on Sept. 30, 1885, to prevent further Boer encroachment and has since remained a British protectorate. The form of government is similar to that of Basutoland.

Most of the inhabitants are Bantu, but there were 2,325 Europeans in 1946, a few of them farmers. The country is essentially pastoral, with cattle raising and dairy farming the chief industries. Gold is mined in the Tati district near Francistown. There is also some mining of silver and copper. Timber is produced for use as fuel and pit props.

The summers are intensely hot; winters (May-August) are pleasant. Rainfall occurs mostly between December and May, and dust storms are frequent.

SWAZILAND—Status: Protectorate.

Capital: Mbabane (population 1,600).

Resident Commissioner: E. B. Beetham.

Foreign trade: included in South African customs union. **Chief exports:** cattle, asbestos.

Agricultural products: cattle, hides and skins, butter, tobacco, corn, millet.

Minerals: asbestos (exports 1947: 27,955 tons), tin (25 long tons), gold (5,637 oz.).

Swaziland lies at the southeastern corner of the Transvaal. It is largely hilly, with an average elevation of 4,000 feet in the west. It came under the protection of the Transvaal Republic in 1894 but was made a British protectorate in 1906 under the high commissioner for South Africa.

The natives are mostly Swazi; there were 2,871 Europeans in 1946, mostly farmers. Grazing is the principal native occupation; there is excellent pasture in the high land to the west. Tropical and subtropical crops are raised in the lower areas. Tin is mined near Mbabane. The country is dependent on road transport, by motor, oxen or mule.

Rainfall is moderate throughout the protectorate and is heaviest in summer. Average temperature ranges from about 65° in July to 80° or more in January.

GAMBIA—Status: Colony and protectorate.

Capital: Bathurst (population 21,152).

Governor: Sir Andrew B. Wright.

Foreign trade (1947): exports £1,094,000; imports £1,204,000. **Chief exports:** groundnuts (1947: 54,245 tons).

Agricultural products: groundnuts, hides and skins, millet, rice, palm kernels.

Gambia, smallest of the British West African dependencies, is a stretch of land 200 miles long on both sides of the lower Gambia River, surrounded on all land sides by French West Africa and fronting on the Atlantic Ocean. During the 17th century it was settled by various companies of English merchants; slavery was the chief

source of revenue until it was abolished in 1807. Gambia became a Crown colony in 1843. Except for the island of St. Mary, on which the capital stands, the area is administered as a protectorate.

The inhabitants, mostly Negroes or negroids, are predominantly Mohammedan. The principal economic activity is the cultivation of groundnuts. Internal transportation is by steamer and launch. Temperatures are fairly regular throughout the year, ranging from about 60° to 85°. Maximum rainfall is in August and September.

GOLD COAST—Status: Colonies (Gold Coast Colony, 23,937 square miles; Ashanti, 24,379 square miles); protectorate (Northern Territories, 30,486 square miles); U.N. trust territory (Togoland, 13,041 square miles).

Capital: Accra (population 78,858).

Governor: Sir Gerald Creasy.

Foreign trade (1947): exports, £21,495,185; imports, £26,178,884. **Chief exports:** cacao, gold.

Agricultural products: cacao (exports 1947: 177,138 tons); copra, palm kernels.

Minerals: gold, manganese, silver, diamonds.

Early a center of the slaving trade and of Anglo-Dutch rivalry, the Gold Coast, stretching along the Gulf of Guinea for 370 miles, became a British possession in 1871. Ashanti, in the interior, became a protectorate in 1896 and was annexed in 1901. The Northern Territories, to the north of Ashanti, were made a protectorate in 1901. The area is administered by a governor with an executive council and a legislative council with an elected majority. Ashanti and the Northern Territories are administered by Chief Commissioners responsible to the governor. Togoland, formerly German, was divided into French and British spheres and placed under League of Nations mandate after World War I and under U.N. trusteeship on Dec. 13, 1946.

Except for 3,200 non-Africans, the population is all Negro. The principal native industry is the cultivation of cacao, in the production of which the colony leads the world. The climate on the coast is hot and humid, ranging on the average from 78° to 80°. Rainfall is chiefly from March to July and from September to October.

KENYA—Status: Colony and protectorate.

Capital: Nairobi (population 108,900).

Governor: Sir Philip E. Mitchell.

Foreign trade (1947): exports, £9,617,941; imports, £27,179,413 (including Uganda). **Chief exports:** coffee, tea, gold.

Agricultural products: coffee, tea, pyrethrum, sugar cane, sisal, corn, cotton, hides and skins.

Minerals: gold, sodium carbonate, silver, salt.

Forest products: wattle bark and extract, timber.

Kenya extends along the Indian Ocean between Ethiopia and Tanganyika Territory and westward to Lake Victoria and

Uganda. Formerly known as the East Africa Protectorate, it was held under a concession from the Sultan of Zanzibar by the Imperial British East Africa Company from 1888 to 1905. It became a crown colony in 1920, the coastal strip leased from the Sultan of Zanzibar becoming a protectorate. Kenya's area is 224,960 square miles.

The colony is predominantly agricultural, and a large area is cultivated by Europeans. Altitude ranges from sea level to more than 9,000 ft.; hence, the cultivation of tropical, subtropical and temperate crops is possible. Non-natives (1945) included 33,678 Europeans, 21,481 Arabs and 61,866 Asiatics (mostly British Indians).

The coastal zone of Kenya is hot and humid; February to April are the hottest months, with a mean temperature of 82° at Mombasa. June and July are coolest (76° at Mombasa). The yearly average rainfall is about 48 inches. In the interior highlands the climate is temperate, and the rainfall comparatively heavy. Yearly average temperatures at Nairobi are 60° to 66°.

MAURITIUS—Status: Colony.

Capital: Port Louis (population 69,471).

Governor: Sir Donald Mackenzie-Kennedy.

Foreign trade (1947): exports, 72,376,500 rupees; imports, 113,964,237 rupees. Chief export: sugar.

Agricultural products: sugar (1947: 349,000 metric tons); copra, tobacco.

Mauritius is a mountainous island of volcanic origin in the Indian Ocean, about 500 miles east of Madagascar. It was seized in 1810 from the French, who had settled it in 1715, and was formally ceded to Great Britain by the Treaty of Paris (1814).

With almost 600 persons per square mile, the island is one of the most densely populated regions in the world. The population has a large white element, chiefly French and British, but British Indians are predominant. There are many half-castes. The leading industry is sugar cultivation.

The climate is pleasant during the cool season, but extremely hot from December to April (90° to 96° at Port Louis). During this period there are also frequent torrents of rain and occasional severe cyclones.

NIGERIA—Status: Colony and protectorate.

Governor: Sir John S. Macpherson.

Principal cities (est. 1947): Ibadan, 400,000 (native metropolis); Lagos, 176,000 (capital); Kano, 90,000 (textiles, leather goods, cattle).

Monetary unit: British pound.

Languages: Native tongues, Arabic, English.

Religions: Mohammedan, Pagan, Christian.

Nigeria, with an area twice that of California, is situated on the Gulf of Guinea in West Africa. It was visited by European traders and explorers in the 16th and 17th centuries, and by the end of the 18th century British operators had a virtual

monopoly in the area. Between 1879 and 1914, a series of private colonial developments by the British, together with reorganizations of the Crown's interest in the region, resulted in the formation of Nigeria as it exists today. During World War I, native troops of the West African frontier force joined with French forces to defeat the German garrison in the Cameroons. The Cameroons, a narrow strip along Nigeria's eastern border, became a League mandate after World War I, divided between France and Britain. Today the British Cameroons, a U.N. trust territory, is attached to Nigeria for administrative purposes.

The governor of Nigeria, named by the British Crown, heads the administration of the colony, which (including the Cameroons) is divided into four sections, each composed of several provinces. The custom of rule by native regimes, advised by British residents, is effected locally wherever practicable. Under the 1947 constitution all legislative bodies have elected non-European majorities, but the governor has an absolute veto.

The vast majority of the population is Negro, although in the north there has been an admixture caused by invasions of Fula, Berber and Arab or Arabized people. Mohammedanism is the dominant religion, but Christian missionary societies are active.

Most of the people are agriculturists. The staple food crops are durra (guinea corn), millet, yams, bananas and maize. Among the leading export crops in 1945 were groundnuts, 337,000 tons; rubber, 11,037 tons (8,300 tons in 1947); cotton, 15,900 bales; cacao, 77,000 tons; and palm kernels and oil. Hides and skins are also a big export item. Aside from small native industry, there is no manufacturing.

Most external trade is with Britain. Exports in 1947 totaled £37,161,631 and imports £39,421,512. Chief exports are groundnuts, palm kernels, cacao and tin ore. There is a substantial internal trade; Kano is a busy terminal for caravan routes. The Niger and several other rivers are navigable; otherwise, the 1,901 miles of railway are the chief means of transportation. Highway mileage totals about 21,000. The main ports, except Lagos, are on rivers. Air service is supplied by BOAC and Air France.

Nigeria is a leading tin producer—12,597 tons in 1947—from mines on the Bauchi plateau. Other minerals are coal, gold, lead, silver and tungsten. Over half the area is forested, but forest resources are comparatively unexploited. Mahogany is the main timber export, followed by cedar and walnut. Gum arabic is also exported.

Extending from twenty to sixty miles inland from the coast is the swampy Niger delta region, gradually giving way to hilly

forest land. The larger part of the colony belongs to the great African plateau which, in Nigeria, reaches a maximum height of 3,000 feet. All of the colony lies within the tropics, but the climate varies from tropical in the south to near temperate on some parts of the plateau. In the south the temperature varies between 70° and 100°, and averages upwards of 80°.

NORTHERN RHODESIA—Status: Colony.

Capital: Lusaka (population 2,396).

Governor: Sir Gilbert Rennie.

Foreign trade (1946): exports, £13,124,972; imports, £8,131,273. Chief export: copper (about 75 percent).

Agricultural products: tobacco, maize, wheat. **Minerals:** copper (1947: 188,500 long tons), cobalt, vanadium, lead, zinc.

Northern Rhodesia is in south central Africa, bounded on the north by the Belgian Congo and Tanganyika Territory, on the east and southeast by Nyasaland and Mozambique, on the southeast and south by Southern Rhodesia and Bechuanaland, and on the west by Angola. Much of the country consists of high plateau, with the Congo-Zambezi watershed rising in places to 5,000 feet. Rhodesia was assigned in 1889 to the British South Africa Company, headed by Cecil Rhodes. Administrative control was transferred to the Crown on Apr. 1, 1924.

Native tribes number from 50 to 60; there were 21,919 Europeans in 1946. More than 3,000,000 acres are owned and occupied by Europeans. Metals constitute almost all exports by value. Lead and zinc deposits occur at Broken Hill; copper at Bwana M'Kuba. The main line of the Rhodesian railway crosses the northern part of the colony from Livingstone to the Congo border. A number of rivers are navigable.

Average temperature in the south ranges from about 65° in July to 80° or more in October. The rainfall occurs principally between November and April.

NYASALAND—Status: Protectorate.

Capital: Zomba (population 5,750).

Governor: Geoffrey F. T. Colby.

Foreign trade (1947): exports (incl. re-exports), £3,065,698; imports, £4,042,564. Chief export: tobacco (about 45 percent).

Agricultural products: tobacco (1947: 13,875 short tons), tea, cotton.

Nyasaland, a British protectorate since 1891, is a narrow area lying between Mozambique, Northern Rhodesia and Tanganyika Territory along the southern and western shores of Lake Nyasa. Agriculture is the chief occupation, both of the European settlers and natives. Europeans numbered 2,400 in 1946.

Lake Nyasa furnishes the principal transportation facility. Mineral and forest resources are limited.

The climate is extremely humid along the shores of Lake Nyasa, although the temperature rarely rises above 95°. In the highlands, above 3,000 feet, average temperatures are considerably lower. The dry season, from May to September, is comparatively cool.

ST. HELENA—Status: Colony.

Capital: Jamestown (population 1,547).

Governor: George A. Joy.

Foreign trade (1946): exports (domestic), £31,790; imports, £94,375. Chief exports: flax fiber and tow.

Agricultural products: flax, potatoes.

St. Helena is a volcanic island (47 sq. mi.) in the South Atlantic about 1,200 miles from the west coast of Africa. It is famous as the place of exile of Napoleon (1815–21). It was taken for Britain in 1651 by the British East India Company and became a crown colony in 1833. Attached to it are Ascension Island (34 sq. mi.), 800 miles northwest, and the Tristan da Cunha group (45 sq. mi.), about 1,500 miles southwest. Most of the inhabitants are of mixed European, East Indian and African descent. Ascension was an Allied air base in World War II.

Although St. Helena is in the tropical zone, its climate is temperate and healthful; the temperature varies from 68° to 84° in summer and 57° to 90° in winter.

SEYCHELLES—Status: Colony.

Capital: Victoria (population 9,497).

Governor: Dr. Percy S. Selwyn-Clarke.

Foreign trade (1947): exports (domestic), 4,163,626 rupees; imports, 5,087,106 rupees. Chief export: copra.

Agricultural products: cinnamon, patchouli oil, coconuts, maize, sugar cane.

This archipelago of about 92 islands in the Indian Ocean was seized from France by British troops in 1794 and was ceded to Great Britain by the Treaty of Paris in 1814. The principal island is Mahé (55 sq. mi.), about 600 miles northeast of Madagascar. The climate of the archipelago is temperate and healthful.

SIERRA LEONE—Status: Colony and protectorate.

Capital: Freetown (population: 86,000).

Governor: Sir G. Beresford Stooke.

Foreign trade (1946): exports, £2,139,624; imports, £3,961,384. Chief exports: diamonds, iron ore.

Agricultural products: palm kernels and oil, rice, millet, cassava, rubber.

Minerals: diamonds (est. 1946: 559,231 carats), iron ore (729,398 long tons), gold.

Forest products: palm kernels, piassava.

Sierra Leone lies on Africa's west coast between French Guinea and Liberia. It is a well-watered hilly country but has a low swampy coastland with an extremely un-

healthful climate. The coastal area (colony proper) was ceded to English settlers in 1788 as a home for Negroes discharged from the British armed forces and also for runaway slaves who had found asylum in London. The British protectorate over the hinterland was proclaimed in 1896. It was not until 1928 that slavery was totally abolished in the protectorate. Freetown is the best harbor on the west coast.

SOMALILAND—Status: Protectorate.

Administrative Center: Hargeisa (population 17,500).

Governor: Gerald Reece.

Foreign trade (1945-46): exports, £318,866; imports, £770,036. **Chief export:** hides and skins.

Agricultural products: cattle, hides and skins, grains.

Forest products: gums and resins.

British Somaliland extends along the Gulf of Aden for about 400 miles and inland for 80 to 220 miles. The interior is an elevated plateau falling in steep escarpments to the coastal plain. It came under Egyptian influence in 1875, but during the years 1884-86 treaties guaranteeing British protection were signed with the various Somali chiefs. Italian troops occupied the protectorate in 1940, but it was retaken by British troops in 1941. Both executive and legislative power is exercised by the governor.

Most of the inhabitants are nomadic Somalis of Mohammedan faith. Their principal activity is stock raising. The climate is extremely hot and arid, with rainfall in the coastal areas averaging less than 8 inches. The average temperature at Berbera, on the coast, is 77° in January and about 98° in July.

SOUTHERN RHODESIA—Status: Self-governing colony.

Capital: Salisbury (population: 61,760).

Governor: Sir John N. Kennedy.

Prime Minister: Sir Godfrey M. Huggins.

Foreign trade (1947): exports, £20,778,395; imports, £33,490,499; re-exports, £2,870,885. **Chief exports:** tobacco, gold, asbestos.

Agricultural products: tobacco (1947: 31,810 short tons), corn, groundnuts, meat, hides and skins.

Minerals: gold (1947: 522,735 oz.), asbestos (54,094 tons), coal, chrome ore.

Southern Rhodesia is located between Northern Rhodesia, Bechuanaland, the Union of South Africa and Mozambique in south central Africa; it is part of the great South African plateau. The Zambezi River separates Northern and Southern Rhodesia. About two-thirds of the area is covered by trees and shrubs.

The country was settled in 1890 by the British South Africa Company, led by Cecil Rhodes. With the expiration of the company's charter, the white residents voted (1922) in favor of a responsible government

of their own, and on Sept. 12, 1923, the country was annexed to Britain.

Southern Rhodesia's constitutional position is midway between that of a colony and a dominion. It has responsible government and a popularly elected Legislative Assembly of 30 members, but control of foreign relations and certain other matters is reserved to the U. K. government.

Most of the inhabitants are natives, but the country is well-adapted to European settlers, who in 1948 numbered 96,000. In addition there were 8,000 Asiatics and half-castes. Mining is the basis of the economy. Farming ranges from ranching to tobacco growing, but mixed farming is becoming more common. Conditions for cattle raising and dairy farming are especially favorable. Manufacturing is of growing importance, with the factories producing goods valued at £13,623,031 in 1945. The colony is well served with railways (1,361 mi.), roads (1,685 mi.) and airlines.

The hottest month is October (mean maximum 85.2°); the coolest are June, July and August, when frost is likely to occur. Generally the days are hot throughout the year, and the nights are frequently cool. Rainfall is greatest in October, November and December.

SOUTH-WEST AFRICA (See UNION OF SOUTH AFRICA)

SWAZILAND (See BRITISH SOUTH AFRICAN PROTECTORATES)

TANGANYIKA TERRITORY—Status: U.N. trust territory.

Capital: Dar es Salaam (population 74,036).

Foreign trade (1947): exports, £11,147,887; imports, £13,723,925. **Chief export:** sisal (about 45 percent).

Agricultural products: sisal (1947 exports: 95,856 long tons), coffee, cotton, groundnuts, sugar cane, tobacco, tea.

Minerals: gold (1947: 47,317 oz.), diamonds (1947: 92,229 carats), tin, mica.

Forest products: gum arabic and copal (1947 exports: 1,554 tons), beeswax, timber.

Tanganyika Territory, with the Belgian Ruanda and Urundi, constituted German East Africa from 1884 until 1919. It was administered under League of Nations mandate by Britain until 1946, when it was placed under United Nations trusteeship, with Britain as the administering power.

Tanganyika's narrow coastal plain is bordered on the west by the precipitous eastern side of the Central African plateau. The territory also includes adjacent islands in the Indian Ocean.

The territory is sparsely populated; about two-thirds of the total area is uninhabited. In 1943 there were 16,709 Europeans and 45,099 Asiatics. It is the world's largest producer of sisal hemp. Most of the hemp, which is of the highest grade, is grown in the drier parts of the coast belt under European supervision. Stock raising is also

important, but its progress is hampered by prevalence of the tsetse fly. What may prove to be the largest diamond vein in the world was discovered at Shinyanga in 1946.

The climate generally is hot and humid on the coastal areas, with the temperature averaging 80° at Dar es Salaam. Rainfall in the capital averages 60 inches. Inland the rainfall and temperature are lower.

UGANDA—Status: Protectorate.

Capital: Entebbe (population 7,321).

Governor: Sir John Hall.

Foreign trade (1947): exports, £11,447,680; imports, £27,179,413 (including Kenya). Chief exports: cotton, coffee.

Agricultural products: cotton, coffee, sugar cane, rubber, tea, sisal.

Minerals: gold, tin.

Uganda lies immediately south of Anglo-Egyptian Sudan and west of Kenya, along the northwest shore of Lake Victoria. The surface is extremely diversified, with lofty plateaus, snow-capped peaks, swamps, forests and arid areas. A British protectorate over the area was proclaimed in 1894. A large measure of home rule is given the native states, notably Buganda, whose *kabaka* (king) is assisted by a ministry and native parliament.

Agriculture, including livestock, is the basis of the economy. Cotton is raised, principally by natives, and coffee, tea and rubber are grown on large plantations. Most natives possess large herds of cattle and sheep. In 1944 there were 2,553 Europeans in the protectorate.

Like the topography, the climate is extremely variable. At Entebbe, the mean temperature is about 70°, with rainfall heaviest from March through May, and in November and December.

Union of South Africa (Dominion)

Area: 472,494 square miles.

Population (est. 1947): 11,391,949 (European, 20.8%; Bantu, 67.6%; mixed, 8.1%; Asiatic, 3.5%).

Density per square mile: 24.1.

Governor General: Gideon Brand Van Zyl.

Prime Minister: Daniel F. Malan.

Principal cities (census 1946): Johannesburg, 727,743 (gold, industrial center); Capetown, 454,052 (seat of legislature, seaport); Durban, 357,304 (seaport); Pretoria, 236,367 (seat of administration); Port Elizabeth, 146,231 (seaport).

Monetary unit: South African pound (£SA).

Languages: English, Afrikaans.

Religions (European population): Dutch Reformed Churches, 55%; Anglican Church, 19%; Methodist, 6%; Presbyterian, 5%; Roman Catholic, 5%; others 10%.

HISTORY. After the discovery of the Cape of Good Hope in 1488 by Bartholomeu Diaz, the Dutch sent the first colonists to the area in 1652. The British seized the

territory in 1814 near the close of the Napoleonic wars, when Holland was France's ally. In protest against the British rule, thousands of Boers, settlers of Dutch descent, trekked northward between 1835 and 1838 and set up the republics of Orange Free State and Transvaal, subsequently recognized by the British.

The discovery of gold in Transvaal in 1886 brought an influx of English and other foreigners. British demands that these immigrants be enfranchised by the Transvaal government precipitated the South African War of 1899-1902, won by the British. By the Treaty of Vereeniging (May 31, 1902) the Boers renounced the independence of Transvaal and Orange Free State. In 1910, Cape Colony, Transvaal, Natal and the Orange Free State were set up as the Union of South Africa, with dominion status and with Louis Botha, a former Boer general, as the first prime minister. During World War I, South African forces seized German South-West Africa, over which the Union later received a mandate by the Treaty of Versailles.

When World War II broke out, there was considerable pro-German and anti-British feeling in South Africa. The country went to war against the Axis, however, under the leadership of Prime Minister Jan C. Smuts, and South African forces fought in many theaters.

The British Royal Family toured South Africa during early 1947 in an effort to strengthen the ties of Empire with the Union, whose anti-British minority had become more vociferous with the war's end.

In the elections of May, 1948, Smuts' United party was defeated by a Nationalist-Afrikaner coalition, which favors strict racial segregation and the establishment of an independent South African republic.

GOVERNMENT. The Union of South Africa, as a self-governing dominion, has its own legislature, a Senate of forty-four members elected for ten years, and a House of Assembly of 153 members elected for five years. All legislators must be Union nationals of European descent, and suffrage is virtually limited to whites. The governor general, appointed by the British Crown after consultation with the Union, can summon or dissolve the Senate and House, but a general election must be held at least once every five years.

In parliamentary elections held on May 26, 1948, 70 seats went to the Nationalist party, 65 to the United party, 9 to the Afrikaner party and 6 to the Labour party. However, the United party polled more popular votes than the Nationalist and Afrikaner parties combined.

The elected councils in each of the four provinces have only such powers as are delegated to them. Each is headed by an administrator appointed by the central government.

Political considerations made the draft inexpedient in World War II, and all members of the armed forces were volunteers. The postwar strength of the defense forces is fixed as follows: army, 4,640; air force, 3,319; navy, 863; a total strength of 8,822 as opposed to 5,549 in the prewar establishment. The navy, only slightly expanded in World War II, has about 60 small vessels.

EDUCATION. Education for white children is compulsory from 7-16. Primary education is free and, except for vocational schools and the five universities, all education is under provincial control.

In 1943 there were 3,383 state and state-aided primary and secondary schools for European scholars, who numbered 399,024, and 5,551 non-European schools with enrollment of 731,548. The average number of university students in 1944 was 13,000.

The official languages are English and Afrikaans. The latter, derived from 17th-century Dutch, is taught in almost all the schools. About 65 percent of the population over 7 years old understands both languages. People speaking Afrikaans as a "home" language predominate in all provinces except Natal, where most of the Asiatic population, chiefly laborers from South India, is concentrated. European and Asiatic immigration is strictly controlled.

AGRICULTURE. South Africa is predominantly a pastoral country, with less than 15 percent of its area considered arable. Sheep and cattle raising are the principal occupations, especially in the high veldt. Wool production in 1946-47 was estimated at 105,000 short tons, and mohair in 1944-45 at 14,744,000 pounds.

Climate and differences in terrain combine to give a great variety of agricultural products. The staple crop is maize, grown widely with a production varying from 1½ to 3 million tons annually. In southwest Cape Province, products of the Mediterranean type predominate, while in the coastal belt of Natal and in northern Transvaal, subtropical crops, especially sugar, are grown.

Production of leading crops in 1944-45 was as follows: maize, 17,870,000 bags of 200 lb. each; wheat, 3,373,430 bags of 200 lb. each; potatoes, 2,500,000 bags of 150 lb.; oats (purchased), 96,236 bags of 150 lb.; barley (purchased), 448,913 bags of 150 lb.; deciduous fruit, 67,634 short tons; cane sugar (1945-46), 553,174 bags of 200 lb.

MANUFACTURING AND TRADE. According to the industrial census of 1943-44, there was a total of 10,684 factories with 398,493 workers, and the gross value of industrial output was £330,557,000. Food, beverages and tobacco, and metal products led the list. As a result of the need for armaments in World War II, the Union's manufacturing is no longer mainly devoted to agricultural processing. A wartime iron

and steel industry was established, and cement, chemical, textile and auto assembly plants were expanded. Steel production in 1947 averaged approximately 50,000 metric tons monthly. The major industrial area is southern Transvaal.

Trade statistics (in millions of South African pounds):

	1938	1945	1946
Exports	32.5	77.5	95.5
Re-exports	3.0	5.5	7.7
Imports	95.6	112.4	214.4

The principal export items ordinarily are sugar, maize, hides and skins, bunker coal, diamonds and fruit. Leading imports are foodstuffs, textiles, machinery, lubricants and automobiles.

COMMUNICATIONS. The well-organized railway system, mostly Union-controlled, totaled 13,479 miles in 1945. Roads suitable for motor traffic in 1947 amounted to 100,000 miles. Regular air service is available to Europe via Cairo and to the U. S. via West Africa and Brazil.

FINANCE. Actual expenditures in 1947-48 were £122,000,000 and revenue £128,425,000. The 1948-49 budget was presented in installments. The public debt on Mar. 31, 1948, totaled £605,257,000. The only bank of issue is the South African Reserve Bank. Notes in circulation on June 1, 1948, £63,590,000; gold reserve £97,030,000 (£80,000,000 was loaned to Britain early in 1948).

TOPOGRAPHY AND CLIMATE. The Union has a high interior plateau, or veldt, nearly half of which averages 4,000 feet in elevation. There are no important mountain ranges, although the Great Escarpment, separating the veldt from the coastal plain, rises to over 10,000 feet. The principal river is the Orange, rising in Basutoland and flowing westward for 1,300 miles through the Union's center to the Atlantic.

Except for the western semi-arid regions, the climate is generally subtropical, much like that of northern Florida. Rainfall averages about 40 inches a year on the east coast and decreases sharply westward. The mean annual temperature is remarkably uniform; at Johannesburg it is 60.6°, with January the hottest month. Most of the rainfall occurs from October to March.

MINERALS, FORESTS AND FISHERIES. Extensive mineral resources account for the economic prosperity. The dominion is the world's leading gold producer; total output of gold up to 1940 was £1,874,593,973. Diamond production is now surpassed in importance by coal. Mineral production for 1946 included gold, 11,918,000 oz. (1947: 11,197,638 oz.); coal, 23,600,000 metric tons; diamonds, 1,282,000 carats; iron ore, 870,000 metric tons (1945); manganese ore, 206,300 metric tons; asbestos, 17,000 metric tons; chromite, 188,900 metric tons, and

silver, 1,200,000 oz. Gypsum, lead, tin, tungsten, platinum and copper also are mined.

Forests cover only a small portion of the Union, and are mostly in the east. The whaling industry, centered at Durban on the east coast, produces considerable amounts of whale oil. The Union has extensive fishery resources along the 1,500 miles of coast line. Annual trawler catch of edible fish is about 95,000,000 pounds.

SOUTH-WEST AFRICA—Status: Mandate.

Administrator: P. I. Hoogenhout.

Capital: Windhoek (population 23,359).

Foreign trade (1946): exports £SA9,675,893; imports £SA6,700,786. Chief exports: karakul skins, butter, slaughter animals, diamonds.

Agricultural products: hides and skins, butter, corn, wheat.

Minerals (1947): diamonds, 179,554 metric carats; vanadium concentrates, 26,126 long tons; tungsten, lead, tin, iron ore and copper.

The mandate, bounded on the north by Angola, and on the east by Bechuanaland and the Union of South Africa, was discovered by the Portuguese explorer Diaz in the late 15th century. It is for the most part a portion of the high plateau of South Africa with a general elevation of from 3,000 to 4,000 feet. It became a German colony in 1884 but was conquered by South African forces in 1915, becoming a Union mandate by the terms of the Treaty of Versailles. The Union of South Africa's application for incorporation of the territory into the Union was rejected by the United Nations assembly on Dec. 14, 1946, and the Union was invited to prepare a trusteeship agreement instead. The administrator is appointed by the Union.

The country in general is better suited to grazing than to the raising of crops because of the light rainfall. The karakul sheep industry is particularly well-developed; in 1947, 1,947,670 skins were produced. The Union accounts for almost all the imports and about 40 percent of the exports. Most of the natives live on large reserves. The principal port is Walvis Bay.

ZANZIBAR—Status: Protectorate.

Capital: Zanzibar (population 60,000).

Sultan: Seyyid Sir Khalifa bin Harub.

British Resident: Sir Vincent Glenday.

Foreign trade (1946): exports (domestic), £1,710,731; imports, £1,769,197. Chief export: cloves.

Agricultural products: cloves (1947: 10,680 tons), copra, sisal.

The protectorate consists principally of the islands of Zanzibar (640 sq. mi.) and Pemba (380 sq. mi.), just off the East African coast. Before 1890, the sultanate's territory also included a large area on the mainland, now comprising Italian Somaliland, Kenya and Tanganyika Territory. It was proclaimed a British protectorate Nov. 4, 1890. The British resident administers

the government, but the sultan still retains considerable authority.

The principal industry is the production of cloves—80 percent of the world supply.

The climate is excessively hot and moist, with a mean annual temperature of 80.5°. June to September is the coolest season.

WESTERN HEMISPHERE

BAHAMAS—Status: Colony.

Capital: Nassau (population 20,000).

Governor: Sir William L. Murphy.

Foreign trade (1946): exports, £399,000; imports, £2,841,000. Chief exports: sisal, vegetables, sponges.

Agricultural products: tomatoes, citrus fruit, sisal.

Sea products: sponges, lobsters.

The Bahamas are an archipelago of about 3,000 islands, islets (cays) and rocks, east of Florida and north of Cuba, extending from N.W. to S.E. for about 800 miles. Only about 20 of the islands are inhabited; the most important is New Providence (20 sq. mi.) on which Nassau is located. The islands were reached by Columbus in Oct., 1492, and were a favorite pirate resort in the early 18th century. They have been a Crown colony since 1717. The constitution provides for a nominated Legislative Council and a popularly elected Assembly. The governor is advised by an Executive Council.

About 87 percent of the population is Negro. The tourist trade is of considerable importance, especially at Nassau, which is a favorite winter resort. The climate is exceptionally agreeable, with mean temperatures ranging from 60° (January to March) to 88° (June to September). The rainy season is May through October; hurricanes occur usually from July to October.

Agriculture, except for tomato and sisal culture, is of little importance. Straw and shellwork are the principal industries. An R.A.F. unit is stationed in the archipelago.

BARBADOS—Status: Colony.

Capital: Bridgetown (population 13,345).

Governor: Sir Hilary Blood.

Foreign trade (1947): exports, £3,715,107; imports, £7,124,930. Chief exports: sugar, molasses, rum.

Agricultural products: sugar (1947: 88,024 long tons), cotton.

Barbados, an island east of the Windward group in the West Indies, has been a British possession since 1627; it is believed to have been first visited by the Portuguese. The colony has a nominated Legislative Council and a popularly elected Assembly of 24 members, but the Crown, represented by the governor, retains veto power.

The island is very densely populated (about 1,180 per sq. mi.). About 70 percent of the inhabitants are Negro, 7 percent

white and the remainder of mixed blood. Approximately 70 percent of the total area is cultivated and half of this is devoted to sugar, which is the staple product; there are 100 sugar and molasses plants and 3 rum distilleries.

Barbados has an agreeable climate, with temperatures that range between 70° and 86°, rarely below 65°. The cold season (December through May) is also the dry season; average annual rainfall is 60 inches, with September the wettest month.

BERMUDAS—Status: Colony.

Capital: Hamilton (population 3,500).

Governor: Admiral Sir Ralph Leatham.

Foreign trade (1947): exports, £780,467; imports, £6,004,841. Chief export: lily bulbs.

Agricultural products: lily bulbs, potatoes, vegetables, arrowroot.

The Bermudas comprise an archipelago of about 360 small islands, 580 miles east of North Carolina. The largest is (Great) Bermuda or Main Island. Discovered by Juan Bermudez, a shipwrecked Spaniard, early in the 16th century, the islands were settled in 1612 by an offshoot of the Virginia Company and became a Crown colony in 1684. The governor is assisted by nominated Executive and Legislative Councils and a popularly elected Assembly of 36 members. In 1940, sites on the islands were leased for 99 years to the U. S. for air and navy bases. Bermuda is also the headquarters of the West Indies and Atlantic squadron of the Royal Navy. The most important factor in the colony's economy is the tourist trade. The mean annual temperature is 71°, with extremes of 49° and 94°. Rainfall averages 58 inches annually.

BRITISH GUIANA—Status: Colony.

Capital: Georgetown (population 73,537).

Governor: Sir Charles Woolley.

Foreign trade (1946): exports, £5,634,000; imports, £5,597,000. Chief exports: sugar, bauxite, gold, rice.

Agricultural products: sugar (1947: 165,148 long tons), rice, copra, coffee.

Minerals: bauxite (1946: 1,254,400 short tons), gold, diamonds.

Forest products: balata, timber.

The only British possession in South America proper, British Guiana is on the northeastern coast between Venezuela and Surinam (Dutch Guiana). Settled by the Dutch in the 17th century, it was occupied by the British in 1796 and ceded to them at the end of the Napoleonic wars. Behind the low plain which contains the farm area is a higher area containing forest and mineral resources. The governor is assisted by an Executive Council; the Legislative Council has an elected majority.

The heterogeneous population contains about 159,000 East Indians, 135,000 Negroes,

8,000 Portuguese, and 9,000 aborigines. The cultivated area covers only 155,000 acres, mostly devoted to rice and sugar cane. About 86 percent of the colony is forested, but the vast forest resources are relatively unexploited. Timber resources in 1946 were estimated at 41,000,000,000 cu. ft. of merchantable timber. Railway mileage is 110, and highway mileage about 700; communication to the interior is mainly by steamer and launch. The colony's production of bauxite was of strategic importance during World War II.

The coastland climate is relatively hot and humid, with average temperatures of 78° in January and 81° in October, and only a slight variation between day and night. Inland temperatures are roughly 3° higher. Rainfall is heavy along the coast.

BRITISH HONDURAS—Status: Colony.

Capital: Belize (population 21,837).

Governor: Vacant.

Foreign trade (1947): exports (including re-exports), \$6,142,601; imports, \$8,656,252. Chief exports: chicle and mahogany.

Agricultural products: bananas, sugar cane, citrus fruits, chicle.

Forest products (1947): cedar lumber (117,578 cu. ft.); mahogany logs (723,500 cu. ft.) and lumber (767,091 cu. ft.); pine lumber (565,805 cu. ft.); chicle (634 tons).

British Honduras is bounded on the north by Mexico and on the west and south by Guatemala. It was settled in 1662 by woodcutters from Jamaica. An irregular form of local government continued until 1871, when it became a Crown colony; it was separated from Jamaica in 1884. The governor is assisted by an Executive Council and a partly elected Legislative Council.

The colony's economy is dependent upon timber and other forest exports. Agriculture has never been adequately developed. There are no railways, and road development is backward (about 135 mi. surfaced). Most of the population are mestizos of Negro, native Indian and white descent.

The climate is subtropical, with maximum recorded temperature of 98°, and minimum of 50°. Rain falls mostly from May to February, and almost continuously from October through December.

Canada (Dominion)

Area: 3,466,882 square miles.

Population (est. June 1, 1948): 12,833,000 (1941: British, 50%; French, 27%; German, 4%; Ukrainian, 2%; others, 17%).

Density per square mile: 3.7.

Governor General: Field Marshal Viscount Alexander of Tunis.

Prime Minister: Louis Stephen St. Laurent (acting).

Principal cities (census 1941): Montreal, 903,007 (seaport); Toronto, 667,457 (manufacturing center); Vancouver, 275,353 (Pacific seaport);

Winnipeg, 221,960 (grain); Hamilton, 166,337 (iron and steel); Ottawa, 154,951 (capital); Quebec, 150,757 (seaport); Windsor, 105,311 (automobiles).

Monetary unit: Canadian dollar.

Religions (census 1941): Roman Catholic, 42%; United Church, 19%; Anglican, 15%; Presbyterian, 8%; Baptist, 4%; others, 12%.

With the second largest continuous land area in the world, stretching across the northern part of the North American continent, the Dominion of Canada is one of the world's leading sources of wheat, minerals, and paper and pulp. Unsurpassed in its record of loyalty to the Empire in both World Wars, the Dominion in 1948 also continued its wartime policy of close military and political cooperation with the U.S.

HISTORY. The Norse explorer Leif Ericsson probably reached the shores of Canada (Labrador or Nova Scotia) in A.D. 1000, but the history of the white man in the country actually began in 1497, when John Cabot, an Italian in the service of Henry VII of England, reached the shore of Newfoundland or Nova Scotia. Canada was taken for France in 1534 by Jacques Cartier. The actual settlement of New France, as it was then called, began in 1604 at Port Royal in what is now Nova Scotia; in 1608 Quebec was founded. France's colonization efforts were not very successful, but French explorers by the end of the 17th century had penetrated beyond the Great Lakes to the western prairies and south along the Mississippi to the Gulf of Mexico. Meanwhile, the English Hudson's Bay Company had been established in 1670. Because of the valuable fisheries and fur trade, a conflict developed between the French and English; in 1713, Newfoundland, Hudson Bay and Nova Scotia (Acadia) were lost to England.

During the Seven Years' War (1756-63), England extended its conquest, and the British general, Wolfe, won his famous victory over Montcalm outside Quebec (Sept. 13, 1759). The Treaty of Paris (1763), put Canada under English control.

At this time the population of Canada was almost entirely French, but in the next few decades thousands of British colonists emigrated to Canada from the British Isles and from the American colonies. Partly to placate the French who were concentrated in Quebec, Canada was divided into Upper (British) and Lower (French) Canada in 1791. In 1840 the two provinces again were joined under one government, and in 1849 the right of Canada to self-government was recognized. By the British North America Act of 1867, the Dominion of Canada was created through the confederation of Upper and Lower Canada, Nova Scotia and New Brunswick. Prince Edward Island joined the Dominion in 1873. In 1869 Canada had purchased from the Hudson's Bay Company the vast

middle west (Rupert's Land) from which the provinces of Manitoba (1870), Alberta and Saskatchewan (1905) were later carved. In 1871 British Columbia joined the Dominion. The country was linked from coast to coast in 1885 by completion of the Canadian Pacific Railway.

During the formative years between 1867 and 1896, the Conservative Party led by Sir John A. Macdonald governed the country, except during the years 1873-78. In 1896 the Liberal Party took over and under Sir Wilfrid Laurier, an eminent French Canadian, ruled until 1911. In World War I, more than 500,000 Canadian soldiers fought for the Allied cause. After the Treaty of Versailles, Canada, a full-fledged nation, was admitted to the League of Nations and appointed its own representatives in foreign countries. By the Statute of Westminster (1931) the British Dominions, including Canada, were formally declared to be partner nations with Britain, "equal in status, in no way subordinate to each other," and bound together only by allegiance to a common Crown. The Liberal Party under W. L. Mackenzie King won the elections in 1935 and was returned to power in 1940 and 1945 (he had previously served as prime minister from 1921 to 1926). On Aug. 5, King resigned and was succeeded by Louis Stephen St. Laurent, Liberal party, as acting prime minister.

PROVINCES AND TERRITORIES

Provinces	Land area (sq. mi.)	Population (est. 1947)
Alberta	248,800	822,000
British Columbia	359,279	1,044,000
Manitoba	219,723	743,000
New Brunswick	27,473	491,000
Nova Scotia	20,743	621,000
Ontario	363,232	4,189,000
Prince Edward Island	2,184	94,000
Quebec	523,860	3,712,000
Saskatchewan	237,975	842,000
Territories		
Northwest Territories	1,258,217	16,000
Yukon	205,346	8,000

Provinces	Capital	Premier 1948
Alberta	Edmonton	Ernest C. Manning ¹
British Columbia	Victoria	Byron I. Johnson ²
Manitoba	Winnipeg	Stewart S. Garson ²
New Brunswick	Saint John	John B. McNair ²
Nova Scotia	Halifax	Angus L. Macdonald ²
Ontario	Toronto	George Drew ³
Prince Edward Island	Charlottetown	Walter Jones ²
Quebec	Quebec	Maurice Duplessis ⁴
Saskatchewan	Regina	T. C. Douglas ⁵

Territories		
Northwest Territories	Ottawa	H. L. Keenleyside*
Yukon	Dawson	J. E. Gibben†

¹S.C.—Social Credit; ²L.—Liberal; ³P.C.—Progressive;
⁴U. Nat.—Union Nationale; ⁵Co-operative Commonwealth Federation.

*Commissioner. †Acting Controller.

GOVERNMENT. Canada, a self-governing dominion of the British Commonwealth of Nations, is a federal union of 9 provinces whose powers are laid down in the British North America Act of 1867. The executive powers nominally rest in the hands of the Governor General, who represents the King and is appointed by the British Government with the approval of the Canadian Government.

Actually, the Governor General acts only with the advice of the Canadian Prime Minister and the members of the Cabinet, who at the same time sit in the Dominion Parliament. The Parliament has two houses: a Senate numbering 96 members appointed for life, and a House of Commons numbering 245 members apportioned according to provincial population. Elections are held at least every five years or whenever the party in power is voted down in the House of Commons or considers it expedient to appeal to the people. The Prime Minister is the leader of the majority party in the House of Commons. Laws must be passed by both houses of Parliament and signed by the Governor General in the King's name. The results of Parliamentary elections on June 11, 1945, were as follows: Liberals, 123; Progressive Conservatives, 68; Cooperative Commonwealth Federation, 28; Social Credit, 14; Bloc Populaire Canadien, 2; Independents and other, 10.

The members of the Cabinet include Louis S. St. Laurent (acting Prime Minister), W. McL. Robertson (Minister without Portfolio), J. A. MacKinnon (Mines and Resources), L. B. Pearson (External Affairs), Alphonse Fournier (Public Works), Lionel Chevrier (Transport), Milton Gregg (Veterans Affairs), Louis S. St. Laurent (acting, Justice), R. W. Mayhew (Fisheries), C. D. Howe (Trade and Commerce), J. G. Gardiner (Agriculture), James J. McCann (National Revenue), Humphrey Mitchell (Labor), Paul J. Martin (Health and Welfare), Ernest Bertrand (Postmaster General), Colin Gibson (Secretary of State), Douglas C. Abbott (Finance), Brooke Claxton (Defense) and Joseph Jean (Solicitor General).

The nine provincial governments are nominally headed by Lieutenant Governors appointed by the Dominion Government, but the executive power in each actually is vested in a cabinet headed by a prime minister, who is leader of the majority party. In eight of the nine provinces the legislature is composed of a one-house assembly elected by the people for 4 years.

In Quebec there is also a second chamber, called the Legislative Council, composed of nominees of the Provincial Government.

JUDICIAL SYSTEM. The judicial system consists of a supreme court in Ottawa (established in 1875), with appellate jurisdiction, and a supreme court in each province as well as county courts with limited jurisdiction in most of the provinces. The Governor General in Council appoints the judges of these courts.

DEFENSE. Canadian armed forces, consisting of the Army, Royal Canadian Air Force and the Royal Canadian Navy, are under the Ministry of National Defense. Conscription was in effect during World War II, but most of the nearly 300,000 men who saw overseas service were volunteers. Canadian casualties were 104,125, including 41,371 dead. In 1947 Canada withdrew the last of its occupation forces from Germany.

The postwar army strength is projected at 25,000 men, plus a reserve force of 180,000. The navy's strength is set at 10,000 men, plus a reserve force of 18,000, with an active fleet of one aircraft carrier, two cruisers, eight destroyers and numerous ancillary craft. The permanent air force is set at 16,000 men with 150 combat planes.

The Royal Canadian Mounted Police is the constabulary maintained by the Dominion Government. In 1946 it had a strength of about 3,000 men. Its duties include the enforcement of smuggling laws, suppression of traffic in drugs, protection of government buildings and dockyards, and counter-subversive work. It is the sole police force operating in the Northwest Territories and Yukon.

EDUCATION. Control of education was specifically delegated to the provinces by the British North America Act of 1867. Elementary schools in all provinces except Quebec are free, as is secondary education in most provinces. The supreme education authority in Quebec is a council of public instruction with two aides supervising the Roman Catholic and Protestant schools respectively. Fees paid by parents having children of school age help defray the cost of education. In the rest of the provinces the system is non-denominational, and education for the most part is compulsory for all children between the ages of 8 and 14. Of Canada's 18 universities, 6 are state-controlled and 12 are independent of provincial control. Leading universities are Toronto, which belongs to the first group, and McGill (Montreal), the second group.

VITAL STATISTICS. In 1946 the birth rate was 26.9 per 1,000 population and the death rate 9.4 per 1,000.

The immigration movement reached its peak in 1913, when 402,432 immigrants were enumerated. Immigration fell off sharply during World War I but rose in the post-

war years to a peak of 167,723 in 1929. Immigration for 1946 totaled 71,719. Emigration from the United Kingdom was actively stimulated in 1947, and approximately 7,000 persons entered Canada.

AGRICULTURE. Agriculture, including horticulture, fruit-growing and the raising of stock and poultry, is the largest single industry. Of the total land area, 549,660 square miles, or 15.8 percent, consists of agricultural land. Canadian farming is based almost entirely on relatively small individual holdings. Canada is one of the world's greatest wheat-exporting countries; production is concentrated in Manitoba, Saskatchewan and Alberta. Canada is also a leading producer of other cereals, the most important in point of value being oats and barley.

CROP PRODUCTION AND ACREAGE

	(in thousands)			
	Acres		Bushels	
	1946	1947*	1946	1947*
Wheat	24,076	23,895	413,725	340,767
Oats	12,074	11,048	371,069	282,714
Barley	6,258	7,465	148,887	141,451
Rye	715	1,156	8,311	13,225
Corn	252	176	10,661	6,682

*Provisional.

Apple growing, carried on in Nova Scotia, southern Quebec and central Ontario, is the chief horticultural activity; other fruit growing regions are the Niagara and Lake Erie districts and southern British Columbia. Sugar beet cultivation is assuming increasing importance, and tobacco is produced in southern Ontario. The production of honey and maple sugar is also important. The estimated value of field crops (1947) was \$1,287,442,000.

Stock raising and dairy farming have grown greatly since 1920. Ontario and Quebec are the most important dairying provinces. In 1946 Canada had 9,747,600 cattle, 5,972,400 hogs, 2,186,000 sheep and 58,466,000 poultry. Butter production in 1947 was 290,800,000 lbs. and cheese 120,000,000 lbs. Wool production in 1947 was about 7,045 tons.

INDUSTRY. Canadian manufactures rely mainly on domestic raw materials; growing industries which depend largely on materials imported in a raw or semi-finished state include the manufacture of automobiles, sugar and rubber goods as well as the iron and steel industry in Nova Scotia, Quebec and Ontario. The latter two provinces account for more than 80 percent of all manufactures. The abundance of cheap water power is one of the chief factors in the growth of Canadian industry. Steel production in 1947 amounted to 2,941,000 tons. In 1944 the gross value of manufactured products was estimated at \$9,074,000,000. Most important, in order of value of output, were food, textiles, clothing, chemicals and electrical products.

TRADE. Canada is a great trading nation of the world. The bulk of its foreign commerce is in raw or semi-finished products.

Trade statistics (in Canadian dollars):

Year	Imports	Exports
1938	\$ 677,451,354	\$ 848,684,133
1939	751,055,534	935,921,713
1940	1,081,950,719	1,193,217,592
1941	1,448,791,650	1,640,454,541
1942	1,644,241,933	2,385,466,046
1943	1,735,076,890	3,001,352,291
1944	1,758,898,197	3,483,098,612
1945	1,585,775,142	3,267,424,288
1946	1,927,279,402	2,312,215,301
1947	2,573,944,125	2,774,902,355
1948*	1,037,100,000	1,166,600,000

*First 5 months.

In 1947, Canada's chief customers by value were the U. S., 37.2 percent; Britain, 27.0 percent; France, 2.9 percent; Union of South Africa, 2.4 percent; and the Netherlands, 2.0 percent. Leading suppliers were the U. S., 76.7 percent; Britain, 7.3 percent; Venezuela, 1.7 percent; India, 1.6 percent; and Cuba, 0.9 percent. Principal exports were wood, wood products, and paper, 31.9 percent; agriculture and vegetable products, especially wheat and flour, 24.6 percent and animal and animal products, especially meat and fish, 11.9 percent.

COMMUNICATIONS. Because Canada's exports are to a large extent bulky raw materials, cheap water transportation is essential. The country's system of canals, especially those connecting the Great Lakes, forms an integral part of the inland communications system. Canal traffic amounted to 18,654,919 tons in 1946; 10,580,146 tons of freight were carried on the Welland Canal alone.

Railway facilities have been improved in relation to the export of wheat from the prairie provinces and to the development of the mineral and wood pulp industries in northern Quebec and northern Ontario. About 90 percent of Canadian railway mileage of 42,500 miles is under the control of two systems, the government-owned Canadian National and the privately-owned Canadian Pacific. Canada's principal merchant marine lines are the Canadian Pacific, which operates a subsidiary ocean steamship company, and the Canadian National, which has minor steamship lines under its control. The merchant marine in 1947 numbered 904 ships (of over 100 tons) with a tonnage of 1,869,766—seventh largest in the world.

In 1942 Canada had 564,538 miles of roads, of which 122,689 were improved and 441,849 unimproved. On April 3, 1946, Canada formally took over 1,500 miles of the Alaska highway. Motor vehicles licensed in 1946 numbered 1,622,463.

Canada's national air service, the Trans-Canada Air Lines, was established in 1937. The number of revenue passengers carried

in 1947 was 427,967 on a dally scheduled route mileage of 32,354. In 1945 Canada had 1,848,791 telephones and 1,759,100 licensed radio sets.

FINANCE. The 1948-49 budget estimated revenues at Can. \$2,644,000,000 and expenditures at \$2,175,000,000. Actual revenues in 1947-48 were \$2,869,000,000 and actual expenditures, \$2,199,000,000. The gross funded debt on March 31, 1948 was reported at \$15,957,381,000 compared to \$16,524,165,000 on March 31, 1947 and \$6,013,000,000 on March 31, 1940. Notes in circulation on March 31, 1948 totaled \$1,097,000,000.

TOPOGRAPHY. Covering the northern part of the North American continent and with an area larger than that of the United States, Canada's topography is extremely diversified. The northeastern region, including most of Quebec, northern Ontario and Manitoba, and the Northwest Territories, with Hudson Bay in the center, is an important source of minerals, wood pulp and water power. In the east the mountainous maritime provinces have an irregular coast line on the Gulf of St. Lawrence and the Atlantic. The St. Lawrence plain, covering most of southern Quebec and Ontario, and the interior continental plain, covering southern Manitoba and Saskatchewan and most of Alberta, are the principal cultivable areas. They are separated by a forested plateau rising from Lakes Superior and Huron. Westward toward the Pacific, most of British Columbia, Yukon, and part of western Alberta are covered by parallel mountain ranges including the Rockies. The Pacific border of the coast range is ragged with flords and channels. The highest point in Canada is Mt. Logan, 19,850 ft., located in the Yukon.

CLIMATE. Canada has great variations of climate. South of the Gulf of St. Lawrence, the maritime provinces have an average temperature of 40° for the year and over 60° for the summer months. In Quebec and northern Ontario the winters are cold and the summers average from 60° to 65°. In southern Ontario the average summer temperature is 65°, with an occasional rise to 90°. The prairie provinces have a distinctly continental climate with comparatively short warm summers and long cold winters. The west coast has a climate similar to that of the southern coast of England. Northwest and northeast of Hudson Bay the climate is too severe for trees.

HYDROGRAPHY. Canada has an abundance of large and small lakes. In addition to the Great Lakes on the United States border, there are nine others which are more than 100 miles long and 35 which are more than 50 miles long.

The two principal river systems are the Mackenzie and the St. Lawrence. The St. Lawrence with its tributaries is navigable

for over 1,900 miles and is the commercial artery of eastern Canada. The northern parts of Alberta and much of northern British Columbia are drained through the Athabaska and Peace Rivers, first north-eastward toward Lake Athabaska and then north through Slave River to Great Slave Lake and finally northwest through the Mackenzie River to the Arctic Ocean. If measured to the head of Finlay River, the Mackenzie has a length of more than 2,500 miles and is navigable for 1,292 miles.

As most of the Canadian rivers have waterfalls on their courses they are of considerable importance as sources of power. Average monthly production of electricity in 1947 was 3,754,000,000 kwh.

MINERALS. Canada's mineral resources are both rich and varied. Mining production in 1946 was valued at \$503,900,000. Metals come mainly from two widely separated regions, the mountain ranges of the Pacific coast and the province of Ontario. Copper ore also exists in Quebec and Manitoba. Production of petroleum (7,729,483 barrels in 1947) centers in Alberta.

MAJOR MINERALS 1947

Mineral	Amount
Asbestos	661,215 tons
Coal	15,860,478 tons
Copper	454,417,045 lbs.
Gold	3,069,476 oz.
Lead	318,106,000 lbs.
Nickel	236,234,327 lbs.
Silver	11,516,577 oz.

FORESTS, WILD LIFE AND FISHERIES. The total area of land covered by forests is estimated at 1,220,405 square miles, of which 770,565 are productive and accessible. Lumber production in 1946 was 2,069,076,000 bd. ft., of which 963,565,000 went to the U. S. Leading types were spruce (773,861,000 bd. ft.) and Douglas fir (574,649,000 bd. ft.). The manufacture of pulp and paper is one of the leading industries. Newsprint production in 1946 totaled 4,143,392 tons, of which 702,012 went to the U. S.

Fishing, Canada's oldest industry, is carried on along the Atlantic and Pacific coasts and on the inland lakes. The most important fish are salmon, cod, herring, mackerel, lobsters, sardines, halibut, haddock, whitefish and trout. The total value of fishery products in 1945 was \$113,871,000.

Fur farming and trapping is also important. Trapping is carried on principally in the North while Quebec, Ontario and Prince Edward Island lead in the number of fur farms. The more important animals raised on fur farms are fox, muskrat, beaver, mink, raccoon and martin. For the year ending June 30, 1946, 7,593,416 pelts valued at \$43,870,541 were taken. Annual fur auctions are held at Montreal and Winnipeg.

Canadian Governors General and Prime Ministers Since 1867

Term of office	Governor General	Term	Prime Minister	Party
1867-1869	Viscount Monck	1867-1873	Sir John A. Macdonald	Conservative
1869-1872	Baron Lisgar	1873-1878	Alexander Mackenzie	Liberal
1872-1878	Earl of Dufferin	1878-1891	Sir John A. Macdonald	Conservative
1878-1883	Marquess of Lorne	1891-1892	Sir John J. Abbot	Conservative
1883-1888	Marquess of Lansdowne	1892-1894	Sir John S. D. Thompson	Conservative
1888-1893	Baron Stanley	1894-1896	Sir Mackenzie Bowell	Conservative
1893-1898	Earl of Aberdeen	1896(2 mos)	Sir Charles Tupper	Conservative
1898-1904	Earl of Minto	1896-1911	Sir Wilfrid Laurier	Liberal
1904-1911	Earl Grey	1911-1917	Sir Robert L. Borden	Conservative
1911-1916	Duke of Connaught	1917-1920	Sir Robert L. Borden	Unionist
1916-1921	Duke of Devonshire	1920-1921	Arthur Meighen	Unionist-Conservative
1921-1926	Viscount Byng	1921-1926	W. L. Mackenzie King	Liberal
1926-1931	Viscount Willingdon	1926(3 mos)	Arthur Meighen	Conservative
1931-1935	Earl of Bessborough	1926-1930	W. L. Mackenzie King	Liberal
1935-1940	Baron Tweedsmuir	1930-1935	Richard B. Bennett	Conservative
1940-1946	Earl of Athlone	1935-1948	W. L. Mackenzie King	Liberal
1946-	Field Marshal Viscount Alexander	1948-	Louis Stephen St. Laurent (acting)	Liberal

FALKLAND ISLANDS AND DEPENDENCIES

Governor: Geoffrey M. Clifford.

This sparsely inhabited Crown colony consists of a group of islands in the South Atlantic about 250 miles east of the South American mainland. Dependencies include all islands and Antarctic territory between 20° and 50° w. long., south of 50° s. lat., and between 50° and 80° w. long., south of 58° s. lat. The chief industry is sheep raising, and apart from the production of wool, hides and skins and tallow, there are no known resources. The whaling industry is carried on successfully from South Georgia Island; 77,817 barrels of whale oil were exported in 1941.

The islands were discovered by John Davis in 1592. East Falkland Island was claimed for France in 1764, and West Falkland Island for Britain the following year. The French settlement later passed to Spain, and in 1829 was colonized by Argentina. The Argentines were ejected by the British in 1833 and have since reasserted their claim to the islands many times, most recently in Feb., 1948. In 1914 the Battle of Falkland Islands was fought nearby, resulting in a British victory. During World War II, Stanley Harbour was an important naval base.

The climate is equable though relatively cold, with temperatures averaging about 47° in midsummer and 37° in midwinter.

JAMAICA AND DEPENDENCIES — Status: Colony.

Capital: Kingston (population 201,911).

Governor: Sir John Huggins.

Foreign trade (1947): exports, £10,171,038; imports, £18,942,877. Chief export: bananas.

Agricultural products: sugar (1947: 170,255 long tons), citrus fruits, bananas (exports 1947: 5,652,526 stems), ginger, coffee, pimento.

Jamaica, the largest island in the British West Indies (4,470 sq. mi.) is eighty miles south of the eastern end of Cuba. Its island dependencies include the Turks and Caicos Islands (about 600 mi. N.E.), Cayman Islands (about 300 mi. N.W.) and two uninhabited cays. It was discovered by Columbus in 1494 and remained in Spanish possession until 1655, when it was taken by the British. According to the constitution of Nov. 20, 1944, the Governor is assisted by a House of Representatives of 32 popularly elected members; a Legislative Council (upper house) of 15 members and an Executive Council of 10 members, 5 of whom are elected by the House of Representatives.

Jamaican sites were leased for 99 years to the U. S. in 1940 for naval and air bases.

The colony's economy depends on agriculture, and about 200,000 acres are under cultivation. Sugar took the place of bananas as the chief crop during World War

II. Jamaica is virtually the sole source of pimento. Manufacture of consumer's goods has increased considerably in recent years.

Rail mileage totals 299, and highways 4,594. Jamaica's favorable climate makes it attractive to tourists. Temperatures at Kingston range from about 71° to 88°, but are considerably cooler inland. The rainy seasons are in May and October.

LEEWARD ISLANDS—Status: Colony.

Capital: St. John's (population 10,000).

Governor: Earl Baldwin of Bewdley.

Foreign trade (1945): exports, £1,200,000; imports, £1,250,000. **Chief export:** sugar.

Agricultural products: sugar, cotton, coconuts, citrus fruits, tobacco.

The Leeward Islands constitute a federated group southeast of Puerto Rico; they are divided into four presidencies—Antigua (108 sq. mi.) and dependencies (83 sq. mi.); Virgin Islands (67 sq. mi.); St. Kitts (68 sq. mi.) and Nevis (50 sq. mi.) and dependency (34 sq. mi.); and Montserrat (32.5 sq. mi.). The whole federation has a nominated Executive Council and a partially elected Legislative Council. Each presidency also has a local administration. In 1940, the U. S. acquired a 99-year lease on sites for a naval and air base on Antigua. The islands are predominantly agricultural.

Temperatures average about 76° in January and 81° in August; rainfall is moderate throughout the year.

NEWFOUNDLAND AND LABRADOR—Status: Colony (dominion status suspended).

Capital: St. John's (population 62,823).

Governor: Sir Gordon Macdonald.

Foreign trade (1946-47): exports, \$69,345,-836; imports, \$74,827,596. **Chief exports:** fish, newsprint.

Minerals (1947): iron ore, 1,443,410 tons; lead concentrates, 34,216 tons; zinc concentrates, 70,403 tons; copper concentrates, 16,137 tons; fluorspar, 25,743 tons.

Sea products (1946-47 exports): total value, \$31,329,741; cod, \$20,576,219; herring, \$4,910,-267.

Forest products (1947): pulpwood, 473,460 short tons.

The island of Newfoundland (42,734 sq. mi.) lies east of Canada at the mouth of the Gulf of St. Lawrence. Its mainland dependency, Labrador (110,000 sq. mi.) is to the northwest, across the Strait of Belle Isle.

The first authenticated discovery was by John Cabot in 1497. The island was annexed to Britain in 1583; France recognized British sovereignty by the Treaty of Utrecht in 1713, but retained important fishing concessions. Newfoundland was a British dominion until Feb. 15, 1934, when financial difficulties forced suspension of its constitution. Full legislative and executive power is now vested in a governor who acts on advice of a six-member commission—three

from Newfoundland and three from the United Kingdom. In Jan. 1941, several sites were leased to the United States for air bases.

Plans were nearing completion late in 1943 for the union of Newfoundland with Canada, following a national plebiscite on July 22 in which advocates of union won out by a narrow majority over those favoring re-establishment of self-government.

Fishing is the main industry; Newfoundland's waters abound in cod. More than half the colony is forested, and the manufacture of newsprint is the second industry. Agriculture is of little importance, but there are extensive mineral resources. The international airport at Gander is used by half a dozen lines flying the North Atlantic.

Newfoundland's climate is moderated by proximity to the ocean. Extreme range of temperature is between 0° and 81°, with February the coldest month and August the warmest. Both rainfall and snowfall are heavy.

TRINIDAD AND TOBAGO—Status: Colony.

Capital: Port of Spain (population 97,571).

Governor: Sir John Shaw.

Foreign trade (1947): exports (including re-exports), BWI \$87,115,147; imports, \$118,783,-075. **Chief exports:** petroleum, sugar.

Agricultural products: sugar (1947: 110,068 long tons), cacao, coconuts.

Minerals: petroleum (1947: 20,520,186 barrels), asphalt (1947: 87,346 long tons).

The islands of Trinidad and Tobago are 16 and 21 miles, respectively, off Venezuela just north of the Orinoco delta. Both were discovered by Columbus in 1498, and remained Spanish possessions until 1797, when the British took them. They are administered by a governor. In 1941 the United States was granted 99-year leases on the islands for naval and air bases covering a total of 25,000 acres.

The soil is rich for the growing of tropical products; sugar and cacao are the principal crops. Trinidad is the leading oil producer of the British Empire, and the world's most notable source of asphalt, found in Pitch Lake, thirty-eight miles southeast of Port of Spain. Port of Spain is the chief port, and a transshipment point for Orinoco trade. About a third of the population is East Indian.

Trinidad's climate is tropical, with a mean annual temperature of 80°. The rainy season is from May to January (except October).

WINDWARD ISLANDS—Status: Colony.

Capital: St. George's (population 5,755).

Governor: Robert D. H. Arundell.

Foreign trade (1946): exports, £1,232,000; imports, £1,721,000.

Agricultural products (1945 exports): arrowroot (St. Vincent), 2,288 tons; nutmeg (Grenada), 2,341 tons; mace (Grenada), 338 tons; cacao.

These islands, four in number, form the southern portion of the Lesser Antilles in the Caribbean; they extend approximately 250 miles from the French colony of Guadeloupe on the north to the British colony of Trinidad on the south. Their total area of about 820 square miles divides as follows: Dominica, 304; St. Lucia, 233; St. Vincent, 150; Grenada, 133. The four units are not federated and have no common legislature or laws, although they do have a common governor.

More than two-thirds of the inhabitants are Negroes, nearly one-third mulatto, and about 2 percent white. Agriculture is the only industry. St. Vincent has a virtual monopoly on the world supply of arrowroot, and Grenada furnishes about 40 percent of the world's nutmeg.

All the islands are of volcanic origin. The climate is pleasant, although rainfall is heavy, particularly in summer. The temperature in January averages 77°, in September, 80°.

ASIA

ADEN—Status: Colony and Protectorate.

Governor: Sir Reginald S. Champion.

Foreign trade (1945): exports, £5,838,000; imports, £11,356,000.

The British colony and protectorate of Aden is situated on the volcanic southern tip of the Arabian peninsula, along the Gulf of Aden. The colony (port) of Aden was annexed to Britain in 1839 and was part of the Bombay Presidency until 1932, when it became a separate province with the chief commissioner responsible to the Indian government. In 1937 it was transferred from Indian to Imperial control as a Crown colony. It is administered by a governor and commander in chief aided by an Executive Council. The 20-odd sultans who rule their respective territories in the protectorate are responsible to him.

The island of Perim (5 sq. mi.), the Kuria Muria Islands, and the island of Kamaran (22 sq. mi.) are attached administratively to Aden.

Aden colony is essentially a transshipment point and bunkering station and the commercial center for the Yemen and the African coast opposite. Aden airport is a station on the Khartoum-Karachi air route. Agriculture is unimportant except for some coffee and tobacco, and manufactures are limited to salt, cigarettes and native dhows.

BAHREIN ISLANDS—Status: Protectorate and Sheikdom.

British Political Agent: C. J. Pelly.

These islands form an archipelago off Arabia's east coast and are nominally an independent sheikdom, ruled by Sheik Sir Salman bin Hamad al Khalifah, but are ac-

tually a protectorate of Great Britain, which is represented by a political agent. They are the center of the Persian Gulf pearl fisheries and the site of an airport on the London-Australia route. The concession for exploitation of petroleum deposits, discovered in 1932, is held by an affiliate of U. S.-owned interests. Output in 1943 was 6,000,000 barrels. Agriculture is of some importance. Most of the trade of the Saudi Arabian provinces of Nejd and Hasa pass through Bahrein. Chief exports are rice, cotton goods, pearls, coffee and tea. The capital and principal port is Manama (pop. 30,000) on Bahrein, the principal island.

BORNEO

STATE OF NORTH BORNEO—Status: Colony.

Capital: Jesselton (population 26,158).

Governor: Edward F. Twining.

Foreign trade (1947): exports, Str. \$16,932,627; imports, Str. \$20,471,707. Chief export: rubber.

Agricultural products: rubber (1947: 17,310 tons), rice, corn.

Forest products: timber, cutch, rattans.

The State of North Borneo, constituting the extreme northern portion of the island of Borneo, consists largely of highlands and occasional open valleys and plateaus. The territory was a British protectorate administered under a royal charter by the British North Borneo Company from 1881 until July 15, 1946, when it assumed the status of a Crown colony. It was occupied by Japanese troops from 1942 until 1945. Labuan (pop. 9,000; area, 30 sq. mi.), a small island off the North Borneo coast, was transferred from the jurisdiction of the Straits Settlements to that of North Borneo in 1946.

The population is comprised largely of aboriginal tribesmen living on a very primitive level of culture and social organization. Mineral resources are believed to be considerable, but the colony's income is based on agricultural and jungle produce.

The climate of North Borneo is tropical, with a mean annual temperature range of only 3°, although extremes of 64° and 91° have been recorded. The total rainfall varies between 60 and 180 inches annually and is heaviest in the last three months.

BRUNEI—Status: Protectorate.

Capital: Brunei (population 16,000).

Sultan: Ahmed Tajudin Akhazul Khairi Wad-din.

British Resident: W. J. Peel.

Foreign trade (1940): exports, £1,122,680; imports, £453,502. Chief export: petroleum.

Agricultural products: rice, rubber.

Brunei lies on the northwestern coast of Borneo, entirely surrounded by Sarawak. It was placed under British protection in 1888, and in 1906 a treaty was concluded whereby the native sultan yielded admin-

istration of the state to a British resident. Japanese troops occupied Brunei from 1942 until 1945.

Most of the inhabitants are Malays. The bulk of the population lives in and around the capital, situated on the Brunei River 9 miles from its mouth. The interior is largely forested and contains rich timber.

Brunei's climate is comparable to that of North Borneo, except that the wet season is longer, often lasting until March.

SARAWAK—Status: Colony.

Capital: Kuching (population 38,247).

Governor: Sir Charles Arden Clarke.

Foreign trade (1947): exports, Str. \$103,138.-; imports, Str. \$72,254,705. **Chief export:** petroleum.

Agricultural products: rice, sago, pepper, rubber.

Minerals: petroleum, gold, silver, coal.

Sarawak extends along the northwestern coast of Borneo for about 500 miles. In 1841 part of the present territory was granted by the sultan of Brunei to Sir James Brooke. The state, enlarged by additional concessions made between 1861 and 1905, continued to be ruled by members of the Brooke family until the Japanese occupation in Dec., 1941. A British protectorate since 1888, Sarawak became a Crown colony July 15, 1946, through agreement between the British government and the then ruling rajah, Sir Charles Vyner Brooke.

The colony is mountainous and very well watered; inland communication is largely by water. Most of the inhabitants are Malays, Dayaks and Chinese. The principal mineral is petroleum, which was discovered at Miri in 1909 and subsequently worked by Sarawak Oilfields, Ltd. There are also important forest resources. Under the enlightened rule of the Brookes, Sarawak had been developed into a highly organized community prior to the Japanese invasion.

Sarawak's climate, though tropical, is healthful; the temperature seldom rises above 90° and falls to 70° at night. Average annual rainfall at Kuching is 160 inches.

Ceylon (Dominion)

Area: 25,332 square miles.

Population (est. June 30, 1948): 7,023,000 (Sinhalese, 69%; Tamil, 23%; Moors, 6%; Burghers and Eurasians, 1%; Europeans [5,000] and others, 1%).

Density per square mile: 277.2.

Governor General: Sir Henry Monck-Mason Moore.

Prime Minister: Stephen Senanayake.

Principal cities (census 1946): Colombo, 361,000 (capital); Jaffna, 63,000 (fibers, tobacco); Kewhiwala-Mt. Lavinia, 56,000; Kandy, 52,000 (tea).

Monetary unit: Ceylonese rupee.

Languages: English, Sinhalese, Tamil.

Religions (est.): Buddhism, 60%; Hinduism, 20%; Christianity, 10%; Mohammedanism and others, 10%.

HISTORY. The youngest dominion in the British Commonwealth, the island of Ceylon lies in the Indian Ocean 12 miles southeast of the southern tip of India at the closest point of proximity. Known to the Greeks and Romans as Taprobane and to Mohammedan seamen as Serendib, it is reputed to have been invaded from India in 504 B.C. by Vijaya, the first Sinhalese king. Buddhism was introduced in the third century B.C. In subsequent centuries the island was invaded and occupied several times by Indian princes.

Ceylon was visited in 1505 by the Portuguese, who found the island divided into seven native kingdoms. The Portuguese settlers were ousted in the middle of the 17th century by the Dutch, who in turn were defeated by an English force in 1796. Ceylon became a Crown colony in 1796, and was formally ceded to England by the treaty of Amiens in 1802.

The Donoughmore constitution of 1931 vested control over most local affairs in a state council, which had an elected majority. The arrangement proved generally unacceptable, and after World War II a commission headed by Lord Soulbury drafted a new constitution. Elections held in Aug. and Sept., 1947, were won by the United Nationalists, a center group. The Ceylon Independence Act received royal assent on Dec. 10, 1947, and on Feb. 4, 1948, Ceylon became a full-fledged, self-governing dominion.

GOVERNMENT. Under the new constitution, Ceylon's government is headed by the Crown-appointed governor general, who is advised by a council of ministers headed by the prime minister. The bicameral parliament consists of a House of Representatives of 95 members elected by full adult suffrage, and a Senate composed of 15 elected and 15 appointed members.

Close relations in defense matters are maintained with the United Kingdom under terms of the 1947 defense agreement, which permits the stationing of British troops on the island. The Royal Navy has an extensive base at Trincomalee.

SOCIAL AND ECONOMIC CONDITIONS. Free education is available in public schools from kindergarten to university, and the level of literacy is high. In 1946 there were 4,135 Sinhalese and Tamil schools with 566,911 pupils and 416 English and bilingual schools with 101,123 pupils. The University of Ceylon (founded in 1942) has more than 1,000 students. Sinhalese, spoken by approximately two-thirds of the population, is an Aryan tongue closely related to Pali.

Ceylon is heavily dependent on food imports, particularly rice, the staple food. A large part of the cultivated land (25% of the total area) is devoted to the chief export crops—tea (1947 exports: 89,000 long tons), rubber (133,271 tons) and coconut products, all of which are grown for the most part on plantations. Other crops include rice, tobacco, fruits, cinnamon and citronella.

Exports in 1947 (including bullion, specie and parcel post) totaled Rs. 889,181,000; imports were Rs. 979,279,000. Chief exports by value were tea, 63.7 percent and rubber, 15.2 percent. Leading customers were Britain, 34.3 percent, the U. S., 14.7 percent and Australia, 8.0 percent.

Ceylon is well served by highways and the government railway, which total 6,551 miles (1942) and 912 miles respectively. A fast ferry connects railheads in India and Ceylon.

Revenue in 1947-48 was estimated at Rs. 441,551,377 and expenditure at Rs. 435,672,408. The net public debt on Sept. 30, 1946, was Rs. 377,380,966.

NATURAL FEATURES AND RESOURCES. Most of the island is flat, but mountains in the south central part rise to 8,000 feet. The island extends to a maximum of 270 miles north and south, and 140 miles east and west. There are numerous rivers, the longest of which is the Mahaweli-Ganga (206 miles).

Mineral resources include graphite (plumbago), gem stones, mica, magnesite and vanadium.

A distinctive feature of Ceylon's climate is the monsoon, which appears in May and in October-November. Annual rainfall varies from 40 inches in the northeast to more than 200 in the southwest. The mean annual temperature at Colombo is 80.5°.

MALDIVÉ ISLANDS. These islands, a group of 12 coral atolls, are a Ceylonese dependency located about 400 miles to the southwest. The population, almost entirely Mohammedan, is about 100,000. Under the hereditary sultan, Amir Abdul Majid Didi, the Maldives have a popular government headed by a prime minister. Fishing and coir making are the leading industries.

CYPRUS—Status: Colony.

Capital: Nicosia (population 34,463).

Governor: Lord Winster.

Foreign trade (1947): exports, £5,140,734; imports, £13,584,889. Chief exports: foodstuffs, copper concentrates.

Agricultural products: barley, wheat, potatoes, wine, fruit.

Minerals: copper ore (concentrates), pyrite ore.

Cyprus, third largest island in the Mediterranean, is roughly equidistant from Asia Minor to the north and Syria to the east. The site of early Phoenician and Greek colonies, it passed in 1571 from the

rule of Venice to that of the Ottoman Empire, under which it remained until 1878, when it was ceded to Great Britain for administrative purposes. On the outbreak of hostilities with Turkey in World War I (Nov. 5, 1914), the island was formally annexed to Great Britain.

The governor is advised by a nominated Executive Council, but he alone possesses the lawmaking power.

Jewish refugees who attempted illegal entry into Palestine during 1946 and 1947 were shipped to Cyprus by the British for internment.

The people are mainly Greeks and Turks, although there is an Armenian colony and a distinct, though small, Latin colony. More than 80 percent of the population is Christian. Agriculture is the principal industry. Sponge fishing is also important, as well as copper mining.

The mean annual temperature is about 69°; annual rainfall averages about 19 inches. A cool, wet season lasts from October to March.

HONG KONG—Status: Colony.

Capital: Victoria (population 447,829).

Governor: Sir Alexander Grantham.

Foreign trade (1947): exports (in Hong Kong dollars): \$1,220,000,000; imports, \$1,540,000,000. Chief export: oils and fats.

Agricultural products: rice, sugar cane.

Major industries: shipbuilding, rope making, cement, sugar refining, textiles.

The colony of Hong Kong comprises the island of Hong Kong (32 sq. mi.), Stonecutters' Island, and the Kowloon peninsula and the New Territories on the adjoining mainland. The island of Hong Kong, located at the mouth of the Canton River about 90 miles southeast of Canton, was ceded to Britain in 1841.

Stonecutters' Island and Kowloon were annexed in 1860, and the New Territories, which are mainly agricultural lands, were leased from China in 1898 for 99 years. Hong Kong was attacked by Japanese troops Dec. 7, 1941, and surrendered the following Christmas Day. It remained under Japanese occupation until Sept., 1945.

Possessing an excellent natural harbor 17 miles in extent, the only safe deep-sea anchorage between Shanghai and Indo-China, Hong Kong is the entrepôt for trade throughout southern China and the western Pacific. Re-exports normally constitute about two-thirds of the imports and nine-tenths of exports. The colony is also an important British military and naval base.

The cities of Victoria and Kowloon contain the greater part of the population, which is overwhelmingly Chinese. Besides those Chinese engaged in agriculture or industry, a large population lives in sampans or junks either in Victoria Harbour

or neighboring bays, supporting itself by fishing or by laboring on the wharves. About 20 percent of the total area of Hong Kong is under cultivation, mostly in the New Territories. Manufacture of consumer's goods, both for local consumption and for export, is also important.

Hong Kong has an agreeable climate, although violent typhoons sometimes descend upon the colony. The average annual temperature is 72°, ranging from 59° in February to 82° in July. The summer is the rainy season.

MALAYAN FEDERATION and SINGAPORE— Status: Protectorates and Crown Colony.

Capital: Singapore (population 1947: 441,885).
Federation Capital: Kuala Lumpur (population 1947: 176,195).

Commissioner General in Southeast Asia: Malcolm MacDonald.

High Commissioner of Malayan Federation: Sir Henry Gurney.

Governor of Singapore: Sir Franklin Gimson.

Foreign trade (1947): exports, Str. \$1,294,-878,000; imports, Str. \$1,367,453,000. Chief exports: rubber (60%), tin.

Agricultural products: rubber (1947: 645,894 long tons), rice, coconuts.

Minerals: tin (1947: 27,026 long tons), iron ore, tungsten, bauxite, manganese ore.

Forest products: timber, gutta-percha, arecanuts.

British Malaya consists of semi-independent states occupying most of the Malay Peninsula and the island of Singapore off the peninsula's southern tip, together with several smaller islands. The native states were brought under British administration by a process of commercial and political exploitation in the late 19th and early 20th centuries. Singapore, founded in 1819 by Sir Stamford Raffles, had been developed into the principal British naval base in the Far East prior to World War II. Japanese troops invaded the Malayan States in December, 1941, and captured Singapore from the mainland February 15, 1942.

By Orders in Council effective April 1, 1946, the Malayan Union was formed from the former "Federated Malay States"—Perak, Pahang, Selangor, Negri Sembilan—the former "Unfederated Malay States"—Johore, Trengganu, Kelantan, Kedah and Perlis—and all parts of the former "Straits Settlements" except Singapore—thus including Penang and Malacca. The small island of Labuan, off Borneo, was transferred to jurisdiction of North Borneo. The Crown colony of Singapore, comprising the island of Singapore and its dependencies—the Cocos or Keeling Islands, and Christmas Island (about 200 miles south of Japan)—remains outside the Malayan Union.

After vigorous opposition, this arrangement was modified on Feb. 1, 1948, and the Malayan Union was replaced by the Malayan Federation, which has a federal

executive and a federal legislative council presided over by the high commissioner. British influence in the affairs of the nine native states is limited to defense and foreign affairs. The sultan of each state has undertaken to promulgate a written constitution for his state. Singapore remains a Crown colony.

The Commissioner General in Southeast Asia is charged with the coordination of administration in the Malayan Federation, Singapore, Sarawak, North Borneo and Brunei.

Rubber and tin form the basis of the area's prosperity. Over 60 percent of the cultivable area is devoted to the growing of rubber, and prewar production accounted for 40 percent of the world supply. Production in 1947-48 was on a prewar level. In 1940 Malaya produced 33.2 percent of the world's output of tin; postwar recovery of the industry has been slow.

The climate of Singapore, principal city of the area, is hot and humid, with practically no seasonal change; mean average temperature is 80°. The average number of rainy days is about 173.

India

(NOTE: This section deals with the subcontinent as a whole, since definitive statistics pertaining to the Union of India and to Pakistan were not yet available at the time of publication. For the post-partition history of the two dominions, see Union of India and Pakistan, below.)

On Aug. 15, 1947, there emerged on the vast subcontinent of India two sovereign independent nations—Union of India with a majority of Hindus, and Pakistan with a majority of Moslems—each a self-governing dominion in the British Commonwealth of Nations, linked to Britain only by a common allegiance to the Crown. Extended communal disturbances, particularly in the Punjab, marked the transfer of power, and in 1948 disagreement between the two dominions still persisted in many fields. The assassination on Jan. 30 of Mohandas K. Gandhi, great Hindu spiritual leader and veteran fighter for independence, shocked the entire world.

History of India Prior to Partition

The Aryans or Hindus who invaded India between 2400 and 1500 B. C. from the northwest found a land already well civilized. Buddhism, founded in the 6th century B. C., had spread through northern India. The first exact date in Indian history is 327 B. C., the year that Alexander the Great invaded India. Meanwhile India continued to be divided into scores of rival states.

In 1526, Mohammedan invaders founded

the great Mogul empire, centered on Delhi, which lasted at least in name until 1857. Akbar the Great (1542-1605) strengthened this empire and became the ruler of a greater portion of India than had ever before acknowledged the suzerainty of one man. The long reign of his great-grandson, Aurangzeb (1658-1707) represents both the culmination of Mogul power and the beginning of its decay.

Vasco da Gama, the Portuguese explorer, visited India first in 1498, and for the next hundred years the Portuguese had a virtual monopoly on trade with the subcontinent. Meanwhile, the English founded the East India Company, which set up its first factory at Surat in 1612 and began expanding its influence, fighting against the Indian rulers and the French, Dutch and Portuguese traders simultaneously.

Bombay, taken from the Portuguese, became the seat of English rule in 1687. The defeat of French and Mohammedan armies by Lord Clive in the decade ending in 1760 laid the foundation of the British Empire in India. From then until 1858, when the administration of India was formally transferred to the British Crown following the great mutiny of native troops in 1857, the East India Company was constantly occupied with the suppression of native uprisings and the extension of British rule.

After World War I, in which even the

Mohammedan states of India sent troops to fight beside the Allies, Indian nationalist unrest rose to new heights under the leadership of a little Hindu lawyer, Mohandas K. Gandhi, called Mahatma Gandhi. His tactics, of a politico-religious nature, called for non-violent revolts against British authority. He soon became the leading spirit of the all-India Congress Party, which was the spearhead of Indian revolt against British rule. In 1919 the British gave added responsibility to Indian officials, and by an act passed in 1935 India was given a federal form of government and a measure of self-rule.

During the 1940's the policy of both the wartime coalition government of Britain and later the Labor Government envisaged an unpartitioned India as a self-governing federal dominion including both British India and the native states. In 1942, with the Japanese pressing hard on the eastern borders of India, the British war cabinet decided to send Sir Stafford Cripps to India to try to reach a political settlement with nationalist leaders. The mission failed. Shortly thereafter the Congress Party took the position that the British must quit India. In August 1942, fearing mass civil disobedience, the Government of India carried out widespread arrests of Congress leaders including Gandhi, Jawaharlal Nehru and Maulana Abul Kalam Azad, president of the Congress Party. Sec-

POLITICAL SUBDIVISIONS OF INDIA PRIOR TO 1947

NOTE: Status of each province and state and agency in 1948 is indicated by numeral in parentheses following name: (1) Union of India; (2) Pakistan; (3) Partitioned between Union of India and Pakistan; (4) Not settled.

Political subdivision	Area, sq. mi.	Population, census 1941
Provinces	865,446	295,808,722
Ajmer-Merwara (1)	2,400	583,693
Andamans and Nicobars (1)	3,143	33,768
Assam (1)*	54,951	10,204,733
Baluchistan (2)	54,456	501,631
Bengal (3)	77,442	60,306,525
Bihar (1)	69,745	36,340,151
Bombay (1)	76,443	20,849,840
Central Provinces and Berar (1)	98,575	16,813,584
Coorg (1)	1,593	168,726
Delhi (1)	574	917,939
Madras (1)	126,166	49,341,810
North-West Frontier Province (2)	14,263	3,038,067
Orissa (1)	32,198	8,728,544
Panth Piploda (1)	25	5,267
Punjab (3)	99,089	28,418,819
Sind (2)	48,136	4,535,008
United Provinces (1)	106,247	55,020,617

*Sylhet district to Pakistan.

Political subdivision	Area, sq. mi.	Population, census 1941
States and Agencies	715,964	93,189,233
Assam (1)	12,408	725,655
Baluchistan (2)	79,546	356,204
Baroda (1)	8,236	2,855,010
Bengal (1)	9,408	2,144,829
Central India (1)	52,047	7,506,427
Chhattisgarh (1)	37,687	4,050,000
Cochin (1)	1,493	1,422,875
Deccan (and Kolhapur) (1)	10,870	2,785,428
Gujarat (1)	7,352	1,458,702
Gwalior (1)	26,008	4,006,159
Hyderabad (1)	82,313	16,338,534
Kashmir (including Feudatories) (4)	82,258	4,021,616
Madras (1)	1,602	498,754
Mysore (1)	29,458	7,329,140
North-West Frontier (2)	24,986	2,377,599
Orissa (1)	18,151	3,023,731
Punjab (1)	38,146	5,503,554
Punjab Hill (1)	11,375	1,090,644
Rajputana (1)	132,559	13,670,208
Sikkim (1)	2,745	121,520
Travancore (1)	7,662	6,070,018
United Provinces (1)	1,760	928,470
Western India (1)	37,894	4,904,156
Total	1,581,410	388,997,955

tions of the nationalist movement, mostly under the leadership of the socialist wing, went underground.

Gandhi was released in May, 1944, and other leaders later. Negotiations for a settlement were resumed and they proved fruitless until the British Labor Government sent a cabinet mission to India in 1946 consisting of Lord Pethick-Lawrence, A. V. Alexander and Cripps. The mission obtained the agreement of the Congress Party and Mohammed Ali Jinnah's Moslem League to a long-term plan for a constitution based on three separate groups of provinces with a minimal center. However, agreement was not reached on an interim government and the Moslem League later reverted to its position of unconditional partition. Finally, in February, 1947, the Labor Government announced its determination to transfer power to "responsible Indian hands" by June, 1948, even if a constitution had not been worked out by that time.

With the appointment at the same time of Lord Mountbatten as Governor General, events moved swiftly. By early June, 1947, agreement was reached on the partitioning of India along religious lines (a plan previously opposed by the predominant Hindus and by Britain) and on the splitting of the provinces of Bengal and the Punjab, which the Moslems had claimed in their entirety.

The Indian Independence Act, passed quickly by both houses of the British Parliament, received royal assent on July 18, 1947, and on Aug. 15 the Indian Empire, united under British rule for almost a century, passed into history.

Pre-Partition Statistics

EDUCATION. In 1946, British India had 147,014 recognized primary schools for boys, with 8,834,742 students, and 20,827 schools for girls, with 3,268,445 students. There were 14,835 secondary schools for males, with 3,051,075 students, and 2,234 schools for girls, with 554,443 students. There also were 13,564 unrecognized schools, those not conforming to government standards, with 467,253 students; and several thousand special schools. In all of India there were 16 universities in 1945 with enrollment of 13,643.

AGRICULTURE. Even in good crop years, India has not been quite self-sufficient in food production. In 1942, about 260,000,000 acres were cultivated, about 20 percent by irrigation. A third of the cropland (1945-46: 79,885,000 acres) is devoted to rice, of which India grows a quarter of the world total. Cotton, grown especially in Bombay and the Central Provinces, is the chief money crop. In this, India ranks second to the United States and grows about 15 percent of the world total. In Bengal is grown a large share of the world's jute. A universal

crop in India is the mixture of groundnuts, sesame, rape, mustard and linseed, which yields seeds for vegetable oil. The 1945-46 pepper crop amounted to 15,100 long tons.

MAJOR AGRICULTURAL CROPS

Crop	Year	Short tons
Barley	1943	582,014
Cotton	1946-47	713,000
Jute	1946	1,189,000
Rice	1945-46	26,249,000
Rubber	1946	17,100
Cane sugar (raw)	1946-47	6,245,000
Tea	1947	296,250
Wheat	1946	9,964,000

Cattle are used for plowing and hauling throughout India, except in the delta tracts, where water buffalo do the work, and in the Indus Valley, where the camel predominates. The 1940 livestock census (excluding the United Provinces and Orissa) showed 130,757,765 cattle and oxen, 35,760,493 water buffalo, 961,563 camels, 49,717,044 goats, 1,710,965 horses, 1,734,679 mules and asses and 45,107,062 sheep.

MANUFACTURING. India, whose factories doubled in number from 1922-42, is among the eight leading industrial countries of the world. Cotton textiles comprise the biggest industry—401 mills in 1946 produced 659,800 short tons of yarn and 3,931,000,000 yards of cloth. In 1940, a total of 303,777 persons worked in 108 jute mills. In 1943 the total number of factories was 13,209, with 2,436,312 workers. Plants making or processing food, chemicals, tea, iron and steel are of especial importance. The Tata Iron and Steel Works in Bihar have an annual capacity of over 1,000,000 tons of pig iron. Indian pig iron production in 1945 totaled 1,494,000 short tons.

TRADE. The external sea-borne trade of British India in 1946-47 included exports valued at Rs. 2,960,000,000, re-exports of Rs. 210,000,000 and imports of Rs. 2,870,000,000. Leading customers were Britain, 25.0 percent; the U. S., 22.9 percent; Ceylon, 4.7 percent; Australia, 4.7 percent; and China, 3.7 percent. Chief suppliers were Britain, 36.8 percent; the U. S., 18.7 percent; Iran, 8.3 percent; Egypt, 4.8 percent; and Australia, 3.7 percent. Principal domestic exports were jute yarns and manufactures, 23.6 percent; tea, 11.8 percent; cotton yarns and manufactures, 9.4 percent; and raw cotton, 9.4 percent.

COMMUNICATIONS. In 1939-40, total tonnage of vessels in foreign trade handled at ports in British India was 20,936,550, of which about 65 percent was British. Tonnage handled in the inter-port trade totaled 27,282,326. Rail mileage in 1944 was 40,925, mostly Imperial State Lines. Passengers carried in 1942-43 totaled 622,333,110; freight, 95,253,000 tons. Highway mileage in 1942 totaled 347,132, of which 261,340 were unsurfaced. Licensed cars and

taxis in British India in 1940 numbered 94,788.

MINERALS. India's most valuable mineral is coal, deposited throughout most of the subcontinent. Manganese ore is mined in the Central Provinces, and gold in Orissa. Assam and the Punjab produce oil. Other minerals include iron ore, crude chromite, monazite, diamonds, magnesite, zircon, silver, graphite, gypsum, tungsten ore and sapphires.

PRODUCTION OF MAJOR MINERALS

Mineral	Year	Amount
Coal	1946	28,356,000 tons
Gold	1946	168,000 oz.
Iron ore	1945	2,530,000 tons
Manganese ore	1945	235,000 tons
Petroleum	1946	2,190,000 bbl.

TOPOGRAPHY. India, which has extreme dimensions both north-south and east-west of about 1,900 miles, is roughly a great triangle. The apex points south. The base, in the north, is the Himalayas, south of which lie extensive plains drained by the Ganges, Sutlej-Indus and Brahmaputra river systems. The great Indo-Gangetic plain extends from the Bay of Bengal on the east to the Afghan frontier and the Arabian Sea on the west. It is the richest and most densely settled part of the subcontinent, containing more than half of the population. Another distinct natural region is the Deccan, a plateau of 2,000 to 3,000 feet elevation, occupying the southern or peninsular portion of the subcontinent. In several regions, the Deccan is quite mountainous.

Part of the new Union of India are several groups of islands—the Laccadives (14 islands totaling about 80 sq. mi.) in the Arabian Sea; and the Andamans (204 islands totaling 2,508 sq. mi.) and the Nicobars (19 islands totaling 635 sq. mi.) in the Bay of Bengal.

India's three great river systems, all rising in the Himalayas, have extensive deltas. The Ganges flows south and then east for 1,500 miles across the northern plain to the Bay of Bengal; its delta begins 220 miles from the sea. The Indus, starting in Tibet, flows northwest for several hundred miles before turning southwest toward the Arabian Sea; it is important for irrigating arid areas in western India (now Pakistan). The Brahmaputra, also rising in Tibet, flows eastward first and then south into India and the Bay of Bengal.

CLIMATE. India's climate varies from temperate in the north to tropical in the south, where temperatures are almost constant the year around. During the November-February cool season, northern India has a climate like that of the Riviera. From March to June steadily rising temperatures reach a peak sometimes as high as 115°, and then comes the southwest monsoon.

Rainfall is heavy in most of India, averaging 50 to 60 inches in Assam and Bengal, and reaching 500 inches in the Garo hills of Assam. Northwest India receives the least rainfall.

Union of India (Dominion)

Area: 1,220,000 sq. mi.*

Population: 335,000,000* (Hindu [predominant], Moslem, Sikh, Christian, Buddhist).

Density per square mile: 274.6*

Governor General: Chakravarthi Rajagopalachari.

Prime Minister: Pandit Jawaharlal Nehru.

Principal cities (census 1941): Calcutta, 2,108,891 (chief port); Bombay, 1,489,883 (seaport; cotton and textiles); Madras, 777,481 (seaport); Hyderabad, 739,159 (trade center); Ahmedabad, 591,267 (manufacturing); Delhi, 521,849 (capital); Cawnpore, 487,324 (textiles, leather); Amritsar, 391,010 (Sikh holy city).

Monetary unit: Rupee.

Principal languages: Hindustani tongues, Bengali, Punjabi, Bihari, Marathi, Tamil, Telugu.

*Unofficial estimate based on 1941 census; no definitive statistics available in 1948.

The Union of India is a self-governing dominion of the British Commonwealth, with actual administration of the government in the hands of the prime minister and his cabinet, who are responsible to the Constituent Assembly. The latter body was charged with drafting a new constitution for the Union.

The draft constitution, published Feb. 25, 1948, describes the Union as a "sovereign democratic republic." It provides for a bicameral parliament composed of the Council of States of 250 members chosen by the states, and the House of the People, of not more than 500 members elected directly by popular vote. The Union's president is to be elected for a five-year term by an electoral college composed of parliament and elected members of the state legislatures. The cabinet headed by the prime minister will aid and advise him but will be responsible collectively to the House of the People. Each of the states is to have a Union-appointed governor, aided by a prime minister and cabinet responsible to an elected legislature. The Union's position vis-à-vis the British Commonwealth of Nations is left to the future of the Constituent Assembly.

As a successor state to India, the Union comprises a large proportion of pre-1947 India, including most of the British Indian provinces, other areas under the administration of British India, and most of the 560-odd native states. Unavoidably, large Moslem and Sikh minorities are contained within its borders—a factor which led to widespread rioting and inter-dominion migration after the transfer of power on Aug. 15, 1947.

The new dominion is one of the largest

and richest nations in the world, containing most of India's industrial wealth and natural resources, together with most of India's large cities.

Most of the roads, railways, seaports and airfields went to the Union of India, as well as much of the known mineral resources of the subcontinent with the exception of chromite. It has almost all the factories of the major industries.

The largest dams remain in the new Union, though there are greater potential sources of hydroelectric power in Pakistan. The Union has large food resources but will have a deficit for some time.

In the division of the former British Indian Army after the transfer of power, the dominion received 45 regiments approximating 250,000 men. Total land strength in 1948 was about 400,000 men, including 25,000 Nepalese Gurkhas. A national guard of 130,000 men was in the process of formation. The division of the Royal Indian Air Force gave the Union 1 transport and 7 fighter squadrons. The Union navy has 1 cruiser (ex-H.M.S. *Achilles*), 3 destroyers, 4 sloops, 2 frigates, 12 minesweepers and several smaller vessels. Almost all the senior officers in the three services are now Indian, although the navy and air force are still headed by British officers in Union service.

The Union's 1948-49 budget on revenue account estimated revenue at Rs. 2,562,-800,000 and expenditure at Rs. 2,573,700,-000, of which 45 percent was earmarked for defense. The budget on capital account estimated revenue at Rs. 1,740,700,000 and expenditure at Rs. 2,865,700,000. The public debt on March 31, 1948, was about Rs. 17,953,600,000. (For other statistics prior to partition, see under India, above.)

Pakistan (Dominion)

Area: 361,000 square miles.*

Population: 70,000,000* (Moslem [predominant], Hindu, Sikh).

Density per square mile: 193.9.*

Governor General (Acting): Khawaja Nazimuddin.

Prime Minister: Liaquat Ali Khan.

Principal cities (census 1941): Lahore, 671,659 (Punjab manufacturing center); Karachi, 359,492 (capital); Dacca, 213,218 (rice, jute); Rawalpindi, 181,169 (military center); Multan, 142,768 (Punjab trading center).

Principal languages: Bengali, Punjabi, Hindustani tongues.

*Unofficial estimate based on 1941 census; definitive statistics were not available in 1948.

As one of the two successor states to India, Pakistan has a status and interim government similar to that of the Union of India.

The new dominion consists of two large sectors of India about 1,000 miles apart,

separated by the Union of India: in the northwest, Sind, Baluchistan, the North-West Frontier Province, western Punjab, the princely state of Bahawalpur, and a few other small native states; in the northeast, eastern Bengal and the Sylhet district of Assam. It contains large communal minorities of Hindus and Sikhs.

Over half the Dominion's population is concentrated in east Bengal which contains only 15 percent of the total area.

Pakistan, poor in industry and natural resources, is primarily an agricultural nation. The Punjab contains important wheat areas, and eastern Bengal is rich in jute, rice and tea. The most important manufacturing area is in the vicinity of Lahore in the Punjab. Karachi, the chief port, is the distribution center for north India. Pakistan contains the valley of the Indus in the west and part of the Ganges delta in the east. Northwest, it controls the strategic mountain passes into Afghanistan.

The death of Ali Jinnah on Sept. 11, brought to the fore, Khawaja Nazimuddin, who was appointed as Acting Governor General by the King of England, on the recommendation of the Pakistan cabinet, effective Sept. 14.

In the division of the British Indian Army, Pakistan received 20 regiments, which, together with levies and contributions of native princes, made a total army strength of about 250,000 in 1948. The Royal Pakistan Navy has a force of 2 sloops, 2 frigates, 6 minesweepers and several smaller vessels. The air force has 1 transport and 2 fighter squadrons. The armed forces have several hundred British officers in dominion service. (For additional statistics prior to partition, see under India, above.)

The Dominion's first budget, for the fiscal year 1948-49, estimated ordinary revenues at Rs. 897,300,000 and expenditures at Rs. 896,800,000. Disbursements on capital account not met from revenue were estimated at Rs. 196,524,000.

NATIVE STATES OF INDIA

Unlike British India, the 560-odd native states and subdivisions, with about 45 percent of the area and one-quarter of the population of India as a whole, were united to Britain only through the suzerainty of the King-Emperor, whose control was limited to broader matters affecting India as a whole. With the promulgation of the Indian Independence Act, British supremacy lapsed, and these states were left free to determine their future course. Most of them, with British encouragement, chose to enter into relations with the Union of India (and a few with Pakistan) similar to those which prevailed with Britain. Thus, the dominion governments

assumed responsibility for defense, foreign affairs and communications, but the states otherwise retained their sovereignty. Most of them are represented in the respective Constituent Assemblies.

Many of the minor states have formed federations, the most important of which are the Union of Eastern States (39 states in Orissa, Bengal and the Central Provinces), the United Deccan State (7 states in south central India), the Union of Rajasthan (15 Rajputana states in west central India) and the Phulkian Union (8 Sikh states in the east Punjab). In addition, about 220 states have been merged into the provinces of the Union.

The large princely state of Jammu and Kashmir on the northwest frontier, 85 percent Moslem with a Hindu ruling prince, was the object of dispute between India and Pakistan in 1948. After invasion by Moslem troops in late 1947, administration was taken over temporarily by the Union of India; the U. N. Security Council voted on April 21, 1948, to hold a plebiscite in the area to determine its future status.

The most important princely state, Hyderabad, located on the southern Indian plateau, refused to accede to either dominion. A one-year "stand-still" agreement was signed with the Union of India on Nov. 29, 1947. However, strained relations continued and on Sept. 13, 1948, India invaded Hyderabad. Hyderabad brought the case to the U.N. immediately and that body took up the case on Sept. 16. On Sept. 17 Hyderabad, which had been speedily subdued after a token resistance, surrendered and requested the U.N. to cease consideration of the case. Hyderabad's ruler (Nizam), Sir Mir Osman Ali Khan (born 1886), is reputedly the richest man in the world. He is Moslem, but the majority of his subjects are Hindu. A form of representative government was introduced by him in Nov., 1947. The capital, Hyderabad (pop. 1941: 739,159), is the fourth city of India.

OCEANIA

Australia, Commonwealth of (Dominion)

Area: 2,974,581 square miles.

Population (census 1947): 7,580,820 (approximately 98% European; 2% aborigines and others).

Density per square mile: 2.5.

Governor General: William John McKell.

Prime Minister: Joseph Benedict Chifley.

Principal cities (census 1947): Sydney, 1,484,434 (seaport, wool market); Melbourne, 1,226,933 (seaport, wool, wheat); Brisbane, 402,172 (seaport, industrial center); Adelaide, 382,604 (seaport); Perth, 272,586 (western seaport); Canberra, 15,156 (capital).

Monetary unit: Australian pound (£A).

Language: English.

Religions (census 1933): Anglican, 38.6%; Roman Catholic, 17.5%; Presbyterian, 10.7%; Methodist, 10.3%; other Christians, 9.1%; others, 13.8%.

HISTORY. Australia was the last continent to be discovered. The first Europeans to land were the Dutch, who sailed into the Gulf of Carpentaria in March, 1606. Later in the same year, Luis Vas de Torres, a Spaniard, sailed through the strait subsequently named for him, and may have touched at several points on the north coast. In 1642 Abel Tasman (for whom Tasmania was named) sailed from west to east along the southern shore and proved that Australia was not a part of the Antarctic continent. The continent was named New Holland, and it was so called until about 1850.

In 1770 Captain James Cook, after visiting New Zealand, sailed to the east coast of New Holland and landed south of the present city of Sydney. His account of the country led to its being claimed and settled by Great Britain.

The first settlement, made in 1788 at Botany Bay, was founded as a penal station for criminals from England. Transportation of criminals was virtually suspended in 1839, and Australia had comparatively few white settlers until gold was discovered in Victoria in 1851, after which immigrants poured in. By 1860 all the states (then separate colonies) except Western Australia had been granted responsible government.

On January 1, 1901, the six Australian states united to form the Commonwealth of Australia. The Commonwealth supported Great Britain wholeheartedly in World War I, sending 329,883 troops abroad, all volunteers, of whom 59,258 were killed, died or were missing. The financial drain on a nation of less than 6,000,000 population was extremely heavy.

The Commonwealth again declared war on Germany September 3, 1939; and in 1940-42, Australian troops distinguished themselves in the African, Balkan, Crete and Malayan campaigns. With the Japanese invasion of Southeast Asia and New Guinea in late 1941 and early 1942, Australia was threatened with invasion for the first time in 150 years. The Commonwealth became a vast base for U.S. troops, and Gen. Douglas MacArthur set up his headquarters there on March 17, 1942.

In the general elections held August 21, 1943, Prime Minister John Curtin's Labour Government was confirmed in office. Curtin died July 5, 1945, and was succeeded by Joseph B. Chifley, also of the Labour party. The Crown's appointment, on Commonwealth recommendation, of the Hon. William J. McKell, a local Labourite, to the office of Governor General, Jan. 31, 1947, to succeed the Duke of Gloucester, was bitterly criticized by the opposition.

GOVERNMENT. Australia, a self-governing member of the British Commonwealth of Nations, is a federal union of six states (New South Wales, Victoria, Queensland, South Australia, Western Australia and Tasmania) and two territories (Northern Territory and Australian Capital Territory). The Constitution is modeled to some extent on that of the United States. Federal legislative power is vested in a Parliament of two houses—the Senate with 36 members (six for each state) and the House of Representatives, with 74 members elected on a population basis. Executive power nominally is exercised by the King, acting through the Governor General, who is appointed by him. Actually, however, the Commonwealth is administered by the Prime Minister and the Cabinet members, who are responsible to the House of Representatives and must enjoy its confidence. The House of Representatives continues its sessions for three years from the date of its first meeting, unless sooner dissolved. Senators are chosen for six years, but the Senate may be dissolved in the event of prolonged disagreement with the House. The party alignment in the House after the elections held Sept. 28, 1946, was as follows (pre-election alignment in parentheses): Labour 43 (49); Liberal 17 (15); Country 12 (10); Independent Labour 2 (0).

Each of the states is headed by a governor appointed by the Imperial Government who is advised by the Prime Minister and his Cabinet; the latter actually administer the government. As in the U. S., the state governments retain the powers not specifically delegated to the federal government. The Northern Territory is administered by the federal government.

Federal judicial power is vested in a Federal Supreme Court of six justices, appointed by the Governor General in Council. Each state has its own judicial system.

The army's peacetime strength is stabilized at about 35,000 men, all volunteers. The navy has a strength of about 10,500 men, with 2 light aircraft carriers, 2 cruisers, 6 destroyers and many other smaller craft in service; 79 vessels are in reserve. The air force has a strength of about 12,000. During World War II, 350,000 men served overseas; casualties totaled 95,923, including 31,123 killed.

SOCIAL AND ECONOMIC CONDITIONS. Normal primary education is provided free by the states. In 1945 there were 8,447 state schools with average attendance of 726,440; 1,817 private schools with average attendance of 249,024; 114 technical schools with total enrollment of 110,841; and 7 universities with enrollment of 15,586.

Australia is the world's chief producer of wool, and sheep farming is the Commonwealth's most important single industry.

About 55 percent of Australia's total area is suitable (mining excepted) only for pastoral pursuits. In 1946 there were 96,396,405 sheep, 13,873,863 cattle, 1,425,509 hogs and 1,265,398 horses. The production of wool in 1946-47 amounted to 491,895 short tons; butter production in 1947-48 was about 178,410 short tons; and cheese, 45,630 short tons. Production of meat averages 1,000,000 long tons annually.

The most important crop is wheat; the areas of heaviest production are in South Australia and New South Wales, but production in Western Australia is rapidly increasing. In 1947, 13,988,000 acres were devoted to wheat. Production in 1947-48 was estimated at 6,710,000 short tons—almost double the 1946-47 production of 3,517,860 short tons. Production of oats in 1946-47 was 311,300 short tons; barley, 289,925 short tons; and maize, 161,589 short tons. Sugar and cotton are grown in Queensland and New South Wales, tobacco in northeast Victoria, and vines chiefly in South Australia and Victoria.

Australian industry has made rapid progress, with the value of industrial output tripling between 1915 and 1940. Manufacturing is concentrated in or near the capital cities and is mainly concerned with primary production such as the processing of pastoral products, although heavy industrial goods are being manufactured in increasing volume. New South Wales is the leading industrial state. Power for industry is derived almost entirely from coal. In 1946-47 there were 803,698 workers producing net output valued at £A412,945,025.

Trade statistics for three years (in millions of Australian pounds) are as follows:

	1937-38	1945-46	1947-48
Exports	141.7	196.9	406.2
Imports	127.3	177.6	338.2

In 1946-47, Australia's leading customers, by value, were Britain, 29.0 percent; the U. S., 15.4 percent; France, 6.7 percent; Belgium, 6.1 percent and Malayan Union 5.7 percent. Chief sources of imports were Britain, 35.6 percent; the U. S., 19.0 percent; India, 8.3 percent and Canada 7.9 percent. Principal exports were wool, 40.8 percent; flour, 7.2 percent; meat, 6.8 percent; hides and skins, 4.9 percent and butter, 4.0 percent.

The principal ports are Sydney, Melbourne and Adelaide. Railway mileage in 1947 totaled 27,180; roads (1944) about 491,000 miles. Civil aviation is under Commonwealth control. The merchant marine in 1945 had 1,803 ships with a net tonnage of 307,462. In 1947 there were 550,409 automobiles, 1,771,247 radios and 855,917 telephones.

Revenue (actual 1946-47) was £A412,437,000 (estimated 1947-48: £A397,000,000); expenditure (actual 1946-47) ordi-

nary £A217,734,000, defense £A232,597,000; (estimated 1947-48: ordinary £A222,505,000, defense £A221,000,000). The public debt on June 30, 1947, was £A2,891,032,000.

NATURAL FEATURES AND RESOURCES. Australia is approximately equal in area to the United States and is more than three-fourths the size of Europe. Much of the continent is an arid plain with neither high mountains nor large forests. The coast line is unusually regular, but two great peninsulas jut out toward New Guinea in the north—Cape York Peninsula and Arnhem Land. Between them lies the Gulf of Carpentaria. A wide bay, the Great Australian Bight, cuts into the south coast. Along the east coast, ranges of mountains run from north to south, reaching their highest point in Mt. Kosciusko (7,352 ft.). West of the mountains are three plains, one drained by the Murray and Darling Rivers which flow into the sea southeast of Adelaide, the second draining into Lake Eyre, a salt lake, and the third—a tropical plain—bordering the Gulf of Carpentaria. The western half of the continent is occupied by a desert plateau which rises into barren, rolling hills near the west coast. It includes the Great Victoria Desert, to the south, and the Great Sandy Desert to the north. The island of Tasmania (26,215 sq. mi.), lying off the southeastern coast, is largely a plateau.

Australia possesses considerable mineral resources. The value of mineral output (1945-46) was £A26,288,000. Most important is gold (1947 output: 937,654 ounces). Second in importance is coal, mined near Sydney, near Brisbane and in eastern Tasmania (1947 output: 16,303,214 tons). The Broken Hill mines in New South Wales are one of the most valuable silver-lead-zinc areas in the world. Silver production in 1946 was 6,182,760 fine ounces; lead, 153,594 short tons; and zinc, 85,474 tons. Other important minerals include tin (2,492 tons), copper (25,378 tons) and iron ore.

Forest products include timber (rough sawn), eucalyptus oil, sandalwood oil, tan bark and yacca gum. Sea products include bêche-de-mer, oysters, pearls, pearl shell, tortoise shell and agar-agar.

CLIMATE. The northern third of the country lies within the torrid zone and the remainder within the south temperate zone. The coolest portion of the mainland (Victoria) is not unlike Spain and south Italy. The average temperature for Australia as a whole is 70°, and the northern coastal areas average 82°. Only in the center of the continent does the annual range of temperature exceed 30°. Large areas of the continent receive less than 10 inches of rain. The eastern highlands and Victoria are the best-watered regions.

Norfolk Island, under Commonwealth

administration since 1914, lies about 800 miles east of New South Wales. It enjoys a delightful subtropical climate. Citrus fruits, bananas and coffee are grown.

PAPUA (British New Guinea)—Status: Territory under Australian administration.

Administrator: J. K. Murray.

Capital: Port Moresby (population 3,000).

Chief exports: rubber, gold.

Agricultural products: coconuts, rubber, copra.

Minerals: gold, silver.

Comprising the southeastern part of the island of New Guinea, with the islands of the D'Entrecasteaux, Louisiade and adjoining groups, Papua was annexed by Queensland in 1883 and by the British Crown in 1888. It came under the control of the Australian Commonwealth in 1901 and became the Territory of Papua in 1906. Japan invaded Papua in early 1942, but with the capture of Buna in December, 1942, Australian control was restored.

In 1940 there were 1,822 Europeans in the territory. About 280,000 acres of land have been leased, chiefly by planters, and more than 62,000 acres are cultivated.

NEW GUINEA, Territory of—Status: U. N. trust territory.

Seat of administration: Port Moresby.

Administrator: J. K. Murray.

Chief export: gold.

Agricultural products: coconuts, cacao.

Minerals: gold, silver, platinum.

The northern section of eastern New Guinea (about 93,000 sq. mi.) was mandated in 1920 by the League of Nations to the government of the Commonwealth of Australia, together with the Bismarck archipelago (New Britain, New Ireland and adjacent islands), the Admiralty Islands with several outlying groups, and the northern Solomon Islands (Bougainville and Buka). It was placed under United Nations trusteeship Dec. 13, 1946, but Australia continues to be the administering power. The administrator advises the governor general of Australia, who can legislate by ordinance. Indirect rule by native chiefs has been continued. Japanese troops occupied much of the territory 1942-45.

FIJI—Status: Colony.

Governor: Sir Leslie Brian Freeston.

Capital: Suva (population 25,395).

Foreign trade (1947): exports, £6,142,802; imports, £5,116,386. **Chief exports:** gold, sugar.

Agricultural products: sugar (exports 1947: 112,433 long tons), copra, bananas, molasses.

Mineral: gold (1947: 134,922 oz.).

Fiji colony consists of an archipelago of from 200 to 250 islands in the South Pacific Ocean about 1,740 miles northeast of Sydney, Australia. The larger islands, including Viti Levu (4,053 sq. mi.) and Vanua Levu (2,130 sq. mi.) are mountain-

ous and of volcanic origin. The archipelago was ceded to Great Britain by the native ruler in 1874.

The population (1946) included 117,501 Fijians and 120,063 British Indians. Importation of the latter to work the sugar plantations has led to important social and economic changes. There has been almost no intermarriage between Fijians and Indians, and considerable ill feeling has developed between them.

During World War II, the archipelago was an important air and naval station on the route from the U. S. west coast and Hawaii to Australia and New Zealand.

Fiji has a pleasant climate, with the temperature seldom leaving the 60°-90° range; rainfall is heavy in the southeastern three quarters of the archipelago, averaging 10-12 ft. annually, but is almost nil in the northwestern quarter.

NAURU—Status: U. N. trust territory.

This small island (8 sq. mi.), an important source of phosphate (exports 1946-47: 101,750 tons) was annexed by Germany in 1888 and was placed under joint Australian, New Zealand and British mandate after World War I. In 1947 it was placed under U. N. trusteeship, with the same three administering powers. It lies about 2,215 miles northeast of Sydney and to the northeast of the Solomon Islands.

New Zealand (Dominion)

Area: 103,416 square miles (104,242 including outlying and annexed islands).

Population (est. 1947): 1,802,623. (1936: European, 94.3%; Maori and half-caste, 5.2%; others [Chinese, Syrian, etc.], .5%).

Density per square mile: 17.4.

Governor General: Sir Bernard Freyberg.

Prime Minister: Peter Fraser.

Principal cities (est. 1947): Auckland (greater), 281,900 (seaport and naval base); Wellington (greater), 183,100 (capital); Christchurch, 159,400 (cereals, stock raising); Dunedin City, 87,700 (textiles, meat freezing).

Monetary unit: New Zealand pound (£NZ).

Language: English.

Religions (census 1936): Church of England, 9.75%; Presbyterian, 23.44%; Roman Catholic, 13.13%; Methodist, 8.05%; Baptist, 1.57%; others, 14.06%.

HISTORY. New Zealand, about 1,250 miles east of Australia, consists of two main islands and a number of smaller outlying islands so scattered that they range from the tropical to the antarctic. The islands, which have approximately the area of Italy, were discovered and named New Zealand in 1642 by Abel Tasman, a Dutch navigator. Captain James Cook explored them in 1769 and after him came many other sailors, sealers, whalers and traders. English missionaries landed in 1814 but

made slow progress. On Jan. 22, 1840, to head off a possible French move to claim New Zealand, Britain formally annexed it. The New Zealand Company was formed the same year and immediately began to send out its first colonists.

New Zealand was granted self-government in 1852, a full parliamentary system and ministries in 1856 and dominion status on Sept. 26, 1907. Meanwhile from 1861 to 1871 there was fierce intermittent fighting with the native Maoris. Gold was first discovered in 1853 and a permanent mining field established in 1861.

New Zealand's Labour Party came to power in 1935 for the first time, with Michael J. Savage as Prime Minister. The party began a program of liberal economic and social measures and it was again successful in the 1938 elections.

When Savage died in 1940, he was succeeded by Peter Fraser, who formed a special war cabinet (New Zealand had joined Britain in the war against the Axis in September, 1939). In World War II, New Zealand troops fought in Egypt, Greece, Crete, North Africa, Sicily and Italy, and the islands served as a major base for U. S. troops in the Pacific war.

GOVERNMENT. New Zealand is a self-governing dominion of the British Commonwealth of Nations. The British Crown is represented by a Governor General named by the King after consultation with the New Zealand government. Parliament has two houses—the thirty-six-member Legislative Council named for seven years by the Governor General with the advice of the Cabinet; and the eighty-member House of Representatives, popularly elected for three years. The House elected on Nov. 27, 1946, had 42 Labour members and 38 National party members. Executive power is vested in the Cabinet chosen from the members of the majority party in the House and headed by the Prime Minister.

Military service was voluntary until July 22, 1940, when compulsory service was instituted. Service outside the Dominion, hitherto voluntary, also became obligatory during World War II. At full mobilization, New Zealand had 157,000 men in the armed forces and 124,000 in the Home Guard. Almost one-third of the whole male population of military age served overseas. The peacetime force is stabilized at 11,000 men. Naval forces include 2 cruisers, 4 corvettes and a number of mine sweepers.

SOCIAL AND ECONOMIC CONDITIONS. State education is free and compulsory between the ages of 7 and 15. More than half the Maoris attend the regular public schools; the remainder attend missionary and native village schools. In 1945, there were 2,049 state elementary schools with 203,397 students, and 169 secondary schools with 38,536 students. University students

in 1946 numbered 10,700. About 6 percent of the national budget is expended on education.

New Zealand's advanced social security system, financed principally by a 5 percent tax on wages, salaries and firm incomes, gives benefits for old age, sickness, unemployment, maternity and hospitalization, widows, orphans, poor families and chronic invalids. The Dominion's death rate is among the world's lowest.

Primarily a grazing country, New Zealand is one of the world's largest exporters of mutton, lamb, wool, butter and cheese. In 1947, livestock included 32,681,799 sheep, 4,670,765 cattle (including 1,678,275 dairy cows) and 549,391 hogs (1946). Wool production for 1946-47 was 180,000 tons (greasy). Scientific dairy management is well advanced. In 1947 New Zealand had 20,103,863 acres under cultivation, 90 percent of it in sown grasses. Outside of grass, the chief crop is wheat—161,044 short tons in 1946-47. Others are oats, barley, potatoes, onions, tobacco, fruits and vegetables. Meat production in 1946-47 was 627,000 short tons; butter, 160,895 tons; and cheese 102,365 tons. Gross agricultural income in 1945-46 was £NZ97,200,000.

In 1945-46 there were 6,990 factories, with 128,208 workers and output valued at £NZ195,421,000. The chief industries are freezing of meat and making of butter, cheese and condensed milk. Others of major importance are electricity generation, saw milling and clothing manufacture.

Trade statistics for three years (in millions of New Zealand pounds) are as follows:

	1938	1946	1947*
Exports	57.1	98.2	129.4
Imports	55.5	72.1	128.7

*Provisional.

In 1947, New Zealand's leading customers, by value, were Britain, 76.6 percent and the U. S., 6.3 percent while the leading suppliers were Britain, 42.7 percent; the U. S., 18.1 percent; Australia, 11.6 percent and Canada, 9.0 percent. Leading exports were butter, wool and frozen lamb.

The merchant marine in 1947 included 474 vessels of 95,089 gross tons. Railway mileage in 1945 totaled 3,684, all but 180 miles government-owned. Highway mileage in 1945 was 58,096.

Governmental revenue for 1947-48 was estimated at £NZ108,860,000 and expenditure at £NZ105,516,000. Revenue from the social security fund was estimated at £NZ39,727,000 and expenditure at £NZ40,039,000. The public debt in March, 1947, totaled £NZ634,800,000. A member of the sterling bloc, New Zealand had overseas funds amounting to £84,938,245 on March 31, 1947.

TOPOGRAPHY, NATURAL RESOURCES AND CLIMATE. New Zealand's two main components are North Island and South Island, separated by Cook Strait, which varies from sixteen to 190 miles in width. North Island (44,281 sq. mi.) is 515 miles long and volcanic in its south central part. It contains many hot springs and beautiful geysers. In the southern part of North Island is Lake Taupo (238 sq. mi.), in the center of a pumice-covered plateau.

South Island (58,093 sq. mi.) has the Southern Alps along its west coast, with Mt. Cook (12,349 feet) the highest point in New Zealand.

Principal minerals are coal (1947: 2,753,704 long tons), gold (1946: 119,271 ounces) and silver (1946: 224,341 ounces). Other minerals of importance include tungsten, pumice, silica sand, asbestos, scheelite, iron ore and phosphate. About 20 percent of the total area is forested; 324,473,000 board feet of lumber were cut in 1942.

Flounder, snapper and tarakihi account for 75 percent of New Zealand's fishery industry. There also are extensive oyster beds. The once important whaling industry declined sharply with development of pelagic whaling.

Numerous rushing streams give New Zealand a great volume of hydroelectric power. South Island has available about 4,000,000 horsepower, and North Island 800,000. About 95 percent of the population has access to power.

The ocean tempers New Zealand's climate, which otherwise might have great variation. The range of mean temperatures is small (at Auckland, 66.3° in January, 51.2° in July; at Wellington, 60.9° in January, 47.2° in July). Rainfall is moderate except on the western slope of the Southern Alps; it averages 45.3 inches annually at Auckland and 47.5 inches at Wellington and is heaviest in winter.

DEPENDENCIES. The Auckland Islands (234 sq. mi.) and Campbell Island (44 sq. mi.) are the principal outlying islands, which have a total area of 307 square miles. They are included within the geographical boundaries of New Zealand as proclaimed in 1847. The Aucklands and Campbell are uninhabited. Six hundred miles north of the Aucklands are the volcanic Kermadec Islands (13 sq. mi.), annexed in 1887.

In Polynesia a number of inhabited islands were brought under New Zealand's control in 1901. Rarotonga and Mangaia in the Cook group total 84 square miles. Niue (or Savage Island) (115 sq. mi.) is the largest island outside the Cook group. New Zealand also administers the Ross Dependency, an antarctic region claimed by Great Britain in 1923, and the Union (or Tokelau) Islands, transferred in 1925 from the Gilbert and Ellice Islands colony.

WESTERN SAMOA—Status: U. N. Trust Territory.

Administrator: F. W. Voelcker.

Capital: Apia (population 10,000).

Foreign trade (1947): exports, £1,351,770; imports, £923,733.

Principal products: copra, cacao, bananas, tropical fruits, rubber.

The former German Samoan Islands were occupied by New Zealand troops in the opening weeks of World War I and were mandated to New Zealand by the League of Nations in 1920 as the Territory of Western Samoa. They came under U. N. trusteeship in 1947, with New Zealand continuing as the administering authority. The administrator is assisted by a legislature with a Samoan majority and a consultative Native Council. There are 9 islands, of which the largest and most populous are Savaii (703 sq. mi.) and Upolu (430 sq. mi.). They are largely mountainous but fertile. The inhabitants are Polynesian Christians.

Pacific Islands

High Commissioner in Western Pacific: Sir Leslie Brian Freeston.

Island groups in the Pacific administered by the British High Commissioner in the Western Pacific include (1) Gilbert and Ellice Islands, (2) British Solomon Islands, (3) Tonga, (4) Pitcairn Island, and (5) New Hebrides Condominium (see French Colonial Empire). The High Commissioner has headquarters at Suva, Fiji.

GILBERT AND ELLICE ISLANDS—Status: Colony.

The islands in these groups (including the Gilbert group; the Ellice group; Ocean Island [the seat of administration], Fanning, Washington and Christmas Islands; and the Phoenix group) were proclaimed a British protectorate in 1892 and annexed as a colony in 1915. The most important product is high-grade phosphate, produced on Ocean Island (1941: 347,664 tons). Ownership of Canton and Enderbury islands in the Phoenix group was long in dispute between Great Britain and the United States until 1939, when an agreement for "use in common" was reached by the two governments. Several of the Gilbert islands were occupied by Japanese forces in World War II, and Tarawa was the scene of one of the fiercest battles in U. S. Marine Corps history in Nov., 1943, when it was retaken from the Japanese.

SOLOMON ISLANDS—Status: Protectorate.

This British protectorate, lying east of New Guinea, includes the islands of Guadalcanal, Malaita, San Cristobal, New Georgia, Santa Isabel, Choiseul and numerous smaller islands. Bougainville, one of the group, is under Australian mandate. The islands, which came under British pro-

tection late in the 19th century, were the scene of several important U. S. naval and military victories during World War II. There are no native states, and administration is carried on by a Resident Commissioner assisted by a nominated Advisory Council. The most important products are copra, coconuts and rubber.

TONGA (FRIENDLY ISLANDS)—Status: Protected state.

This native Polynesian kingdom in the Pacific came under British protection through the Anglo-German agreement of November 14, 1899. The native queen is advised by a British Agent; the 22-member native Legislative Council is partly elected and partly nominated. The only important products are copra and bananas.

PITCAIRN ISLAND—Status: Colony.

Located in the south Pacific, about midway between Australia and South America, Pitcairn has an area of 2 square miles. It was settled in 1790 by British mutineers from the ship "Bounty," commanded by Capt. Bligh. Overpopulation forced removal of the settlement to Norfolk Island in 1856, but about 40 soon returned. The island is governed by an elected council headed by a chief magistrate. The population in 1944 was 86.

Bulgaria (Republic)

(Blgariya)

Area: 42,741 square miles (including Southern Dobruja).

Population (census 1946): 7,020,863 (1934: Bulgarian, 86.7%; Turkish, 10.1%; Gypsy, 1.3%; others, 1.9%).

Density per square mile: 164.2.

Chief of State: Mincho Neychev.

Premier: Georgi Dimitrov.

Principal cities (census 1946): Sofia, 434,888 (capital); (census 1934), Philippopolis (Plovdiv), 125,440 (commercial center); Varna, 77,792 (Black Sea port); Ruschuk, 53,420 (chief Danube port); Burgas, 43,684 (Black Sea port).

Monetary unit: Lev.

Languages: Bulgarian, Turkish.

Religions: Greek Orthodox, 84.4%; Mohammedan, 13.5%; Jewish, .8%; Roman Catholic, .8%; others, .5%.

HISTORY. Bulgaria, with a strife-ridden political past, is an agrarian country about the size of Virginia. It sided timidly with Germany in World Wars I and II, hoping to win territory. It lost in both wars.

The first Bulgarians, a tribe of wild horsemen akin to the Huns, crossed the Danube from the north in A.D. 679, and took the province of Moesia from the Roman Empire. They adopted a Slav dialect and Slavic customs and twice conquered most of the Balkan peninsula between 893 and 1280. After the Serbs subjected their kingdom in 1330, the Bulgars gradually

fell prey to the Turks, and from 1396 to 1878, Bulgaria was a Turkish province. In 1878, after the Turks had ruthlessly suppressed a Bulgar revolt, Russia forced Turkey to give the country its independence; but the European powers, fearing that Bulgaria might become a Russian dependency, intervened. By the Treaty of Berlin (July, 1878), Bulgaria became autonomous under Turkish sovereignty, with the province of Eastern Rumelia under a Christian governor.

In 1887 Prince Ferdinand of Saxe-Coburg-Gotha was elected ruler; on Oct. 5, 1908, he declared Bulgaria (and Rumelia) an independent kingdom and was proclaimed Tsar.

In the First Balkan War (1912-13), Bulgaria joined its neighbor states and defeated Turkey; then it bickered with Serbia and Greece over division of Macedonia and was defeated by them in the Second Balkan War, which lasted one month—June-July, 1913.

Still coveting Macedonia, Bulgaria joined Germany in World War I and lost. On Oct. 3, 1918, Tsar Ferdinand abdicated in favor of his son, who became Tsar Boris III. The Treaty of Neuilly the next year disarmed Bulgaria, reduced it to its 1878 size, and levied a heavy indemnity. Internal disorder, underground intrigue and Agrarian-Communist agitation marked the next fifteen years.

Boris assumed dictatorial powers in 1934-35. When Hitler awarded his nation Southern Dobruja, taken from Rumania in 1940, the weak but land-hungry Boris joined the Nazis in war the next year and occupied parts of Yugoslavia and Greece. Later, with the fortunes of war swinging inexorably against them, the Germans tried to force Boris to send his troops against the Russians. Boris resisted and died under mysterious circumstances on Aug. 28, 1943.

Simeon II, the infant son of Boris, became the nominal ruler under a regency, and Bulgaria began to make desperate gestures of friendship to the Allies. Three days after Russia declared war on Bulgaria on Sept. 5, 1944, Bulgaria declared war on Germany. Russian troops streamed in the next day, and under an informal armistice a coalition "Fatherland Front" cabinet was set up under Kimon Georgiev.

The Fatherland Front regime represented the Communist, Zveno, Agrarian and Social Democratic parties, but real power was in the hands of the Communists, who had active Soviet support and were ably led by Georgi Dimitrov, veteran party leader and former secretary-general of the Comintern.

This Government initiated extensive social and economic reforms, instituted a ruthless purge of war criminals and suppressed all political groups which failed to subscribe to its policies. Despite re-

peated promises at Big Three conferences that democratic liberties would be safeguarded and free elections held, the elections of Nov. 18, 1945, and Oct. 27, 1946, were conducted in typical Communist manner, with the Fatherland Front securing overwhelming majorities, according to official figures.

After the plebiscite of Sept. 8, 1946, which resulted in overthrow of the monarchy, and the Oct. 27 elections, the Communists quickly moved to take over the Government officially and to reduce the political opposition to complete impotence. Dimitrov replaced Georgiev as Premier on Nov. 22, 1946.

During 1947 and 1948, Bulgaria continued to strengthen its ties with its Balkan neighbors back of the "iron curtain." Some indication of trouble in its relations with the U. S. S. R. arose, however, when Moscow snubbed Dimitrov's proposal to create an East European union. Difficulties with Greece also continued as the latter charged Bulgaria with violation of the Greek border and assistance to Greek guerrillas.

GOVERNMENT. The constitution of Dec. 4, 1947, modeled after that of the Soviet Union, provides that the unicameral National Assembly is "the supreme organ of the State." The Assembly elects a 15-member presidium, the president of which is the nominal chief of state. Governmental administration is carried on by the premier and his cabinet, who are responsible to the Assembly. On Feb. 4, 1948, the Communist-dominated Fatherland Front was declared the only official party.

PEACE TREATY OF 1947. Under the treaty which took effect Sept. 15, 1947, Bulgaria's boundaries are those which existed Jan. 1, 1941, thus including Southern Dobruja. Bulgaria is to pay reparations in the amount of \$45,000,000 to Greece and \$25,000,000 to Yugoslavia and is to make compensation for damage to Allied property in Bulgaria at the rate of 75 percent of the cost of replacement.

DEFENSE. The 1947 treaty fixed the strength of the armed forces as follows: army 55,000; anti-aircraft artillery 1,800; navy 3,500; and air force 5,200 men and 90 aircraft, none of them bombers. The army was purged of all anti-Communist officers late in 1946 and has been reorganized along Soviet lines.

SOCIAL AND ECONOMIC CONDITIONS. Though elementary education is compulsory and free between 7 and 14, the census of 1934 showed 20.4 percent of the males and 42.8 percent of the females illiterate. Schools in 1941 included 256 kindergartens, 5,568 primary schools and 2,260 high schools with a total enrollment of 1,051,508. The only university (Sofia) had an enrollment of 9,744 in 1942.

Most of the population is Greek Orthodox. Clergy of all faiths are paid by the state. The national language, Bulgarian, is closely related to Russian; both employ the Cyrillic alphabet.

Bulgaria is predominantly agrarian, with 80 percent of the population engaged in agriculture. Because of the mountainous character of the country, however, only about 43 percent of the land is tilled or used for pasture. Most landholdings are small, and primitive methods of cultivation predominate. More than half the cultivated area is devoted to cereals, including wheat (production in 1946, 1,638,389 tons), corn, barley, oats and rye. Other crops are tobacco (1947: 50,000 tons), alfalfa, cotton, flax, potatoes and sugar. There are extensive vineyards in the southern valleys. Production of silkwork cocoons is highly developed. In 1946 Bulgaria had 499,000 horses, 1,440,000 cattle, 7,982,000 sheep, 863,000 goats, and 719,000 hogs.

Industries of Bulgaria are of minor importance and with three exceptions—preparation of tobacco leaf, distillation of attar of roses, and flour milling—are confined to domestic markets. All industries of any importance have been nationalized.

Foreign trade necessarily consists of the exchange of agricultural products for cheap manufactures. Statistics, in billions of leva, are as follows:

	1939	1946	1947
Exports	6.07	14.94	24.53
Imports	5.20	17.51	21.42

Exports in 1947 totaled 24,530,000,000 leva and imports 21,420,000,000 leva. Bulgaria's leading customers, by value, are U.S.S.R., 52.0 percent and Czechoslovakia, 19.0 percent. Leading export is tobacco, 80.0 percent. Leading imports from U.S.S.R., 61.0 percent and Czechoslovakia, 16.0 percent.

Although the Danube is navigable along the northern border, only a comparatively small percentage of prewar Danube ship tonnage was Bulgarian. Railroad mileage, all nationalized, totaled 2,402 in 1945; highway mileage was 13,870.

Government revenues and expenditures for the year 1947 were estimated to balance at 57,200,000,000 leva.

TOPOGRAPHY, NATURAL RESOURCES AND CLIMATE. Two mountain ranges and two great valleys mark Bulgaria's topography. The Balkan belt crosses the center of the country, almost due east-west, rising to a height of 7,800 feet. The Rhodope range breaks off from the Balkans in the west, curves and then straightens out to run nearly parallel along the southern border. Between the two ranges is the valley of the Maritsa, Bulgaria's principal river. Between the Balkan range and the Danube, which forms most of the northern boundary with Rumania, is the Danubian table-

land, traversed by several short rivers. Southern Dobruja, a fertile region of 2,900 square miles below the Danube delta, is an area of low hills, fens and sandy steppes.

Soft coal is Bulgaria's only important mineral; production in 1946-47 was 1,096,-106 short tons. Other mineral products include aluminum and rock salt.

About 30 percent of the country is forested, but a large part is unproductive scrub, and most of the valuable woods are virtually inaccessible. Wood imports usually exceed exports.

Bulgaria's climate is characterized by cold winters and warm summers approaching the subtropical in the south. Rain and snowfall average twenty to forty inches a year. Temperatures at Sofia average 28° in January and 69° in July.

Burma (Republic)

Area: 261,749 square miles.

Population (est. 1941): 16,823,798 (Burmans, 60%; Shans, 7%; Chins, 2%; Kachins, 1%; Indians, 6%; Chinese, 1%; Indo-Burmans, 1%; others, 22%).

Density per square mile: 64.3.

President: The Sawbwa of Yawnghwe (provisional).

Premier: Thakin Nu.

Principal cities (est. 1942): Rangoon, 501,219 (capital, chief port), Mandalay, 150,000 (river port, upper Burma), Moulmein, 70,000 (seaport); (census 1931) Bassein, 45,662 (river port).

Monetary unit: Burmese rupee.

Languages: Burmese, English.

Religions (1931): Buddhist, 84.3%; Animist, 5.2%; Mohammedan, 4%; Hindu, 4%; Christian, 2.3%; others, .2%.

HISTORY. Lying on the eastern side of the Bay of Bengal between India, China and Siam, the Union of Burma came into existence as an independent state on Jan. 4, 1948. The new republic, however, was torn by internal lawlessness and political agitation, and its economic progress was still hampered by severe war damage.

In 1612 the British East India Company sent agents to Burma, and in the 17th and 18th centuries the Burmese stoutly resisted the efforts of British, Dutch and Portuguese traders to establish posts on the Bay of Bengal. Actual British rule dated from 1826, and in 1886 British troops forced the annexation of all Burma to India. On April 1, 1937, the British separated Burma from India and set it up as a Crown colony with its own legislature and a British governor.

For hundreds of years a battlefield of petty princes, Burma became a key battleground in World War II largely because the 800-mile Burma Road was the Allies' vital supply line to China. The Japanese in-

vaded the country in Dec., 1941, and by May, 1942, had occupied most of it, cutting the road. In Aug., 1942, the Japanese set up a puppet government under Dr. Ba Maw.

After one of the most difficult campaigns of the war, Allied forces liberated most of Burma prior to the Japanese surrender on Aug. 14, 1945. Civil government was resumed in Oct., 1945, but the native nationalist feeling continued strong, and British control was maintained only with difficulty.

An agreement with Britain signed on Jan. 27, 1947, gave the Burmese an opportunity to determine their future form of government. The leftist Anti-Fascist People's Freedom League secured a majority in the Constituent Assembly elections held April 9, 1947, and the Assembly voted on June 17, 1947, to declare Burma a republic. The interim Premier, U Aung San, was assassinated July 19, 1947, and was succeeded by Thakin Nu.

The Burma Independence Act, enacted Dec. 10, 1947, provided for the transfer of power in accordance with the provisions of the earlier Anglo-Burmese treaty signed at London Oct. 17, 1947. On Jan. 4, 1948, the last British governor formally handed over full political control to the new Burmese government.

GOVERNMENT. The constitution adopted by the Constituent Assembly Sept. 24, 1947, provides for a government headed by the president, who is elected by the two houses of parliament—the Chamber of Deputies and the Chamber of Nationalities—meeting in joint session. The president appoints the premier on nomination of the Chamber of Deputies; the cabinet must enjoy the confidence of the Chamber of Deputies. Three frontier areas—the Shan, Kachin and Karenni states, are constituent parts of the Union but enjoy some autonomy. The constitution contemplates a form of state socialism, with the operation of all public utilities and the exploitation of all natural resources to come eventually under state control.

The 1947 treaty permits Britain to maintain military training missions in Burma until 1950.

SOCIAL AND ECONOMIC CONDITIONS. Burma had 27,015 schools in 1940, with enrollment of 851,922. More than half these institutions, however, are monastic schools. Because of the many Buddhist village schools, the percentage of wholly illiterate men is small. There is a university at Rangoon, with 2,365 students in 1940.

The natives in general are Mongolian; the Burmese are the most advanced. British Indians, settled in the delta region, supply most of the coolie labor, while the Chinese constitute the artisan and merchant class. Buddhism, the national religion, profoundly affects the national character; every village has its temple.

Burma is essentially agricultural, with crop growing concentrated in the delta and river valleys. It is a leading producer of rice, the staple food, which occupies two-thirds of the cultivated area. Output in 1946-47 was 4,357,600 short tons. Crops grown in the dry zone in upper Burma include millet, cotton, groundnuts and sesamum. Other crops include tobacco, fruit, vegetables and cereals. About 1½ million acres are under irrigation. The number of rubber plantations has increased. The principal domestic animals are water buffalo, used as a beast of burden in the delta, and small humped oxen, which predominate in other areas.

Leading industries include silk weaving and dyeing, rice husking, oil refining and wood carving.

The whole Burmese economy was disrupted during the Japanese occupation, and rehabilitation has made slow progress, hampered by lack of heavy material, consumer's goods and transport, and in some areas by extreme lawlessness.

Exports in 1940-41 totaled £41,535,000 and imports £22,162,500. Rice accounted for approximately two-fifths of the exports; others were lead, tin, petroleum, other minerals. More than one-third of the export trade and half the import trade were with India. Definitive postwar trade statistics have not been issued.

Revenue in 1947-48 was estimated at Rs.319,403,000 and expenditure at Rs.356,357,000.

The principal commercial arteries are the Irrawaddy, navigable for 900 miles to Bhamo, and its tributaries. Regular steamer service is maintained to Bhamo. Railways designed to supplement river transport totaled 2,060 miles in 1940, all state-owned. There are no rail connections with India or any other country. The length of improved roads was 6,811 miles in 1940. In addition, the Burma Road connects Lashio, a rail terminus in northern Burma, with Kunming, China.

TOPOGRAPHY, NATURAL RESOURCES AND CLIMATE. Slightly smaller than Texas, Burma is divided into three natural regions: the Arakan Yoma, a long, narrow mountain range forming the barrier between Burma and India; the Shan Plateau in the east, extending southward into Tenasserim; and the Central Basin running down to the flat, fertile delta of the Irrawaddy in the south. This delta contains a network of inter-communicating canals and nine principal mouths.

Mineral resources are considerable but, in many cases, undeveloped. Production by the Burmah Oil Company, Ltd., in 1939, was 7,396,000 barrels, but had dropped to approximately 1,000,000 barrels by 1944. Other minerals include lead, silver, tin, zinc, nickel, cobalt, copper, gold, iron ore,

molybdenum, coal, rubies, sapphires and jade. Postwar recovery has been slow.

More than half of Burma is forested, with government reserves totaling 31,637 square miles. Teak, valuable for naval construction, is the main timber product. Its cutting is strictly controlled. Fisheries are exploited both along the coast and inland.

Burma forms part of the Asiatic monsoon region, but its climate is modified by the topography. There are three seasons: (1) cool and rainless (November through February); (2) hot and rainless (March through May) and (3) rainy (June through October). At Rangoon the annual temperature range is only 10°; at Mandalay, about 20°. Annual rainfall at Rangoon is about 100 inches; at Mandalay, 33.4 inches.

Chile (Republic)

(República de Chile)

Area: 290,085 square miles.

Population (est. 1947): 5,522,000 (est. 1938: white, 30%; mestizo, 65%; Indian, 5%).

Density per square mile: 19.0.

President: Gabriel González Videla.

Principal cities (est. 1946): Santiago, 1,001,-849 (capital); Valparaíso, 259,995 (chief port); Concepción, 85,813 (farming center); Viña del Mar, 80,013 (resort center); Talca, 56,735 (farming center).

Monetary unit: Peso.

Language: Spanish.

Religion: Roman Catholic.

HISTORY. Chile has had a relatively tranquil history amid South America's long record of revolution and strife, but it has suffered repeated labor disturbances in recent years.

Europeans first arrived in 1536, when Diego de Almagro, an associate of Pizarro, led an unsuccessful invasion from Peru. Five years later another Spaniard, Pedro de Valdivia, founded Santiago. On Sept. 18, 1810, Chile rebelled against Spanish rule, but independence was not won completely until 1818, when Bernardo O'Higgins and José de San Martín finally crushed the Spanish armies.

Chile, which has never lost a war, fought with Bolivia and Peru in 1879-83 and won the province of Antofagasta, Bolivia's only outlet to the Pacific, as well as extensive areas from Peru. In World War I, Chile was neutral. The overthrow in 1931 of Colonel Carlos Ibáñez, who had seized power in 1927, was followed by a brief chaotic period in which seven presidents tumbled in and out of office, but Dr. Arturo Alessandri (1932-38) did much to restore Chile's political and economic order.

Pedro Aguirre Cerda, victor in the 1938 elections, initiated an extensive socialist program before his death on Nov. 25, 1941.

The term of Juan Antonio Ríos, elected as Radical candidate of the Popular Front in 1942, was marked by political dissension and labor difficulties. Under both external and internal pressure, the latter notably from its strong Communist party, Chile finally broke relations with the Axis on Jan. 20, 1943, but did not declare war on Japan until Feb. 14, 1945.

Ríos died June 27, 1946. Following a special election, Gabriel González Videla, candidate of a leftist-center coalition, became president on Nov. 3, 1946. His administration was plagued by recurrent labor disputes, some of which were said to be Communist-inspired. In 1948 he continued to pursue a strong anti-Communist policy.

GOVERNMENT AND DEFENSE. The nation elects a president every six years, a Senate of forty-five members every eight years (one half renewable every four years) and a Chamber of Deputies of 147 members every four years. The president is assisted by a cabinet responsible to him but subject to impeachment by Congress, which also may override a presidential veto by two-thirds vote. All literate male citizens over twenty-one may vote in elections.

Military service is compulsory, beginning at twenty with an initial training period of nine months, after which a civilian is on reserve until the age of forty-five. In 1948 the army was unofficially estimated at 25,000. The navy, normally 8,000 men strong, had in 1948 one old battleship of 28,000 tons, two old cruisers, eight destroyers, nine submarines and two coast defense craft. The air force, with 200 planes and 3,000 men in 1940, expanded during World War II.

SOCIAL AND ECONOMIC CONDITIONS. Education, free and compulsory between 7 and 15, is directed by the central government. In 1943, illiteracy was estimated at 24 percent, third lowest in Latin America. School enrollment in 1947 was about 600,000. There are five universities, including the State University of Chile. About 20 percent of the budget is devoted to education.

The base of the white population is Spanish, although there are some German, English, Irish and Scotch. Roman Catholicism is the dominant religion, but church and state were separated in 1925.

Chilean agriculture is mostly confined to the temperate central valley, similar to that of California. The available productive land is extremely limited, and most of it must be irrigated. Wheat is the leading crop, followed by potatoes, oats, barley, corn, string beans and fruits. Grapes, next to wheat in acreage, produced 84,500,000 gallons of wine in 1947. Feudal-type estates, averaging 2,500 acres, predominate. Cattle in 1946 totaled 2,386,000 and sheep 5,900,000. The livestock industry does not supply local needs, but wool is used in Chilean

textile mills, and wool and hides are exported.

Foreign trade (in millions of U. S. dollars):

	1933	1946	1947
Exports	131	213	277
Imports	103	197	266

In 1947 the U. S. took 44.5 percent of the exports by value, Britain 10.5 percent, France 8.8 percent and Argentina 7.7 percent. The U. S. supplied 44.3 percent of the imports, Peru 13.4 percent and Argentina 10.7 percent. Copper comprised 62.2 percent of the exports and nitrate 12.4 percent. Leading imports are textiles, industrial machinery, transportation material and oils, paints and chemicals.

Although Chile dreams of great industrial development and has all the necessary raw materials except high-grade coal and tin, progress continues slowly. Except for mineral processing, most manufacturing is of low-priced consumer's goods, particularly textiles. A steel industry was established in 1946, however, with production expected to begin in 1949. In 1940 there were 4,034 factories with 123,091 workers.

Highway mileage totals approximately 30,000, about a third of which is improved. Rail mileage is 5,434, partly electrified. Civil aviation is highly developed in the interior, and several international lines serve the country. The 1940 merchant marine totaled 106 vessels of 160,232 gross tons.

Deficit financing continues to be a serious problem. The preliminary 1948 budget put expenditures at 7,716,000,000 pesos, but the accumulated deficit on June 30, 1947, was 2,159,000,000 pesos. At the beginning of 1947, the national debt was 14,586,000,000 pesos. U. S. investments in 1942, mostly in mining and manufacturing, were \$413,983,000. British investments were estimated at \$46,030,511 on Dec. 31, 1947.

The basis of the country's economy is its mineral resources in the northern desert provinces of Atacama, Antofagasta and Tarapacá, where the only natural nitrate in the world is found. Some 60 percent of the world's iodine is obtained as a by-product of nitrate processing. Chile's world monopoly in nitrate, however, declined in importance with development of the synthetic product.

The world's largest copper reserve, estimated at 134 billion pounds, is in Chile, and also more than 900 million tons of high grade iron ore. The reserve of Chilean coal, noted for quantity rather than quality, exceeds two billion tons.

Mineral production in 1947 was as follows: coal, 2,079,116 metric tons; copper, 426,670 metric tons; iron ore, 1,737,553 metric tons; gold, 168,850 troy ounces; silver, 747,300 troy ounces; manganese ore (1946), 10,192 metric tons; mercury (1946), 28.5 metric tons. Nitrate production (1947) was

1,625,000 metric tons. Cobalt, zinc, tungsten and molybdenum also are produced. Oil was first produced in Tierra del Fuego in Dec., 1945.

Forests, estimated to cover 35 million acres in the southern provinces, yield a variety of commercial wood, including conifer, laurel and magnolia. Fishery products include cod, eel, oysters, sawfish, sardines and tuna. Whale-oil production in 1946 was 3,300 short tons.

TOPOGRAPHY AND CLIMATE. A narrow, mountainous land, Chile is 2,661 miles in length, and varies from 46 to 250 miles in width; one-third of its area is covered by the towering ranges of the Andes. In the north is the mineral-rich Atacama Desert, between the coast mountains and the Andes. In the center is a 700-mile-long valley, thickly populated, between the Andes and the coastal plateau. In the south, the Andes border on the ocean.

At the southern tip of Chile's mainland is Punta Arenas, the southernmost city in the world, and beyond that lies the Strait of Magellan and Tierra del Fuego, an island divided between Chile and Argentina. The Juan Fernández Islands, in the South Pacific about 400 miles west of the mainland, and Easter Island, about 2,000 miles west, are Chilean possessions.

Chile's short rivers are useful only for irrigation and as sources of electric power. The country has many ports but few good harbors, and most of the tonnage must be handled by lighters.

In Chile's extreme north the days are hot, the nights warm on the coast and cool in the interior. Central Chile's climate is comparable to that of southern California, and southward in the lake regions the climate is similar to that of the U. S. Pacific Northwest. In the extreme south, fogs and storms keep the mean temperature low. Santiago has extreme recorded temperature ranges of 25° and 96°. Snow is rare.

China (Republic)

(Chung-Hua Min-Kuo)

Area: 3,858,900 square miles.*

Population (est. 1948): 463,493,418.*

Density per square mile: 120.1.*

President: Chiang Kai-shek.

Premier: Wong Wen-hao.

Principal cities (est. 1948): Shanghai, 4,630,385 (chief port, industrial and financial center); Peiping (Peking), 1,772,840 (political, educational center); Tientsin, 1,772,840 (commercial center); Canton (1945), 1,115,000 (southern seaport); Chungking, 1,002,787† (wartime capital); Nanking, 1,113,920 (capital).

Monetary unit: Chinese dollar.

Language: Chinese.

Religions: Confucianism, Buddhism, Taoism, Mohammedanism, Christianity.

*Including Province of Formosa (Taiwan), Manchuria and Tibet; excluding Outer Mongolia. †Est. 1946.

HISTORY. China, second in size and first in population among the countries of the world, was the first victim of the aggressions that led to World War II. Japan seized Manchuria in 1931-32 and invaded China proper in 1937. In the years that followed, China suffered untold destruction and lost millions of lives through military action or starvation.

China was not only fighting a powerful external enemy; it was also torn by internal dissensions between the Chiang Kai-shek government and the Communists of the north. When 1945 finally brought victory over Japan, China still suffered cruelly. The war's wake brought on new famines and a renewal of the old internal struggle, and prospects for peace still appeared dim in 1948.

China is ancient and wise, but backward. Its recorded history is among the world's oldest. By 2000 B.C., Chinese were living in the Hwang Ho basin, and they had achieved an advanced stage of civilization by 1200 B.C. The great philosophers, Lao-tse, Confucius, Mo Ti and Mencius lived during the Chou dynasty (about 1122 to 249 B.C.). The warring feudal states were first united under Emperor Ch'in Shih Huang Ti, during whose reign (246-210 B.C.) work was begun on the Great Wall. Under the Han dynasty (206 B.C. to A.D. 220) China prospered and opened trade with the West.

The T'ang dynasty (618-907) has often been called the golden age of Chinese history. Painting, sculpture and poetry flourished under royal patronage, and printing made its earliest known appearance.

The Mings, last of the native rulers (1368-1644), overthrew the Mongol or Yuan dynasty (1280-1368) established by Kublai Khan, whose dominions extended into eastern Europe. The weakening Mings in turn were overthrown in 1644 by invaders from the north, the Manchus.

The Chinese closely restricted foreign activities, and by the end of the 18th century only Canton (and the Portuguese port of Macao) were open to European merchants. Following the Anglo-Chinese war of 1839-42, however, several treaty ports were opened and Hong Kong was ceded to Britain. Treaties signed after further hostilities (1856-60) weakened Chinese sovereignty and removed foreigners from Chinese jurisdiction. The disastrous Chinese-Japanese War of 1894-95 was followed by a scramble for Chinese leases and concessions by European powers which resulted in the nationalist Boxer Rebellion (1900), suppressed by an international force.

The death of the Empress Dowager Tzu Hsi in 1908 and the accession of the infant emperor Hsüan T'ung (Pu-Yi) were followed by a nation-wide rebellion led by Dr. Sun Yat-sen, who became first Presi-

dent of the Provisional Chinese Republic in 1911. The Manchus abdicated on Feb. 12, 1912. Dr. Sun resigned in favor of Yuan Shih-k'ai, who suppressed the republicans but was forced by a serious rising in 1915-16 to abandon his intention of declaring himself Emperor. Yuan's death in June, 1916, was followed by years of civil war between rival militarists and Dr. Sun's republicans. The death in 1925 of Dr. Sun, who had controlled only the Canton area in opposition to the recognized regime, was followed by a revival of the Kuomintang party, which practically deified him. Nationalist forces, led by Gen. Chiang Kai-shek and advised originally by Communist experts, soon occupied most of China, setting up a Kuomintang regime in 1928. Internal strife continued, however, and Chiang broke with the Communists.

An alleged explosion on the South Manchurian Railway on Sept. 18, 1931, brought invasion of Manchuria by Japanese forces, who installed the last Manchu emperor, Henry Pu-Yi, as nominal ruler of the puppet state of "Manchukuo." Japanese efforts to take China's northern provinces in July, 1937, were resisted by Chiang Kai-shek, who meanwhile had succeeded in uniting most of China behind him. Within two years, however, Japan seized most of the ports and railways. The Kuomintang government retreated first to Hankow and then to Chungking, while in "Occupied China" the Japanese set up a puppet government at Nanking headed by Wang Ching-wei. In 1943 Chiang became political as well as military leader of "Free China."

When the Japanese surrendered in 1945, a treaty was signed with the Soviet Union providing for Soviet withdrawal from Manchuria, joint Chinese-Soviet control of Manchurian railways for 30 years, a joint Chinese-Soviet naval base at Port Arthur and a free port at Dairen. (The latter two provisions have been ignored by the U.S.S.R.). The surrender touched off a race between Nationalist and Communist forces for control of important centers in North China and Manchuria. Agreement was reached for the establishment of a Political Consultative Council representing all groups on Oct. 10, 1945, but fighting broke out again early in 1946 with the Communists controlling northern and central Manchuria and northern China.

The struggle continued through 1948 with neither side making any decisive gains. Meanwhile, after trying repeatedly to secure Communist participation, Chiang Kai-shek on Nov. 15, 1946, convened a National Assembly, representing all groups, to draft a constitution. This instrument, democratic in nature, was approved on Dec. 25, 1946, and took effect a year later.

The National Assembly elected in Nov., 1947, under the constitution's provisions convened on March 29, 1948, and named

Chiang Kai-shek first president. The vice presidency went to Gen. Li Tsung-jen, a liberal Kuomintang critic. Chiang took office May 20 and appointed Dr. Wong Wen-hao, one of China's leading scientists, to the premiership. Wong's first cabinet consisted of 18 Kuomintang, 4 Young China and 2 non-party members.

GOVERNMENT. Under China's new Constitution, the highest state organ is the National Assembly, which meets once each three years and is the "sovereign organ of the people." Its members are elected for 6-year terms on the basis of territorial and professional representation. The Assembly elects the President and Vice President of the Republic for 6-year terms. The organs of government are five in number—the Executive Yüan (cabinet), whose members, headed by the Premier, are appointed by the President with the concurrence of the Legislative Yüan; the Legislative Yüan, which exercises legislative functions when the Assembly is not in session and has ultimate control over the cabinet; the Control Yüan, broadly corresponding to an "upper house," which has general supervisory and censorial functions; the Judicial Yüan, the highest court of justice; and the Examination Yüan, which controls civil service.

All citizens of 20 and over have the right to vote. The Kuomintang party continues to be the dominant group in the national government.

DEFENSE. Military service is compulsory; the initial training period is one or two years. The President is supreme commander of all forces. According to an official tabulation in 1947, the national army numbered 4,557,362, of whom only about 1,500,000 were combat effectives. The small air force had about 550 planes. With a U. S. donation of small warships, the navy in 1948 had 3 cruisers, 6 destroyers and more than 200 smaller vessels. About 80 percent of the national budget is tabbed for military purposes.

The separate Communist armies in Manchuria and north China number about 1,500,000 in organized units. They are equipped with considerable captured Japanese matériel.

EDUCATION. Recent years have seen marked progress toward mass education. There were, in 1947, 193 institutions of higher learning with an enrollment of 120,000; in 1946 there were 4,530 secondary schools with an enrollment of 1,394,844, and 785,244 primary schools with 21,831,398 pupils. Education is nominally compulsory between the ages of 6 and 12. The mass education and literacy movement has been accompanied by the replacement of the old classical or "dead" Chinese language with the popular vernacular (Pai-hua) of the Mandarin dialect, employing perhaps 1,000 of the most essential of the many thousands of Chinese ideographs.

POPULATION AND RELIGION. Estimates of China's population vary and are only calculated guesses, since no national census has ever been taken. The population is quite unevenly distributed, with most of it in the following five areas: the central portion of the northern plain (Shantung); the Yangtze Kiang delta; a coastal belt extending southward from the Yangtze delta to the Canton delta; the Hupeh basin centered around Hankow; and the isolated basin of Szechwan, far to the west. Most Chinese who are not Christians or Moslems practice one of the three native religions—Confucianism, Buddhism or Taoism. Almost 10 percent of the population is estimated to be Moslem; there are also many Roman Catholics and Protestants.

AGRICULTURE. In China, nearly 80 percent of the population depend on the land for livelihood. Subsistence crops are necessarily emphasized, but China is still not self-sufficient in food. Cultivation is intensive, holdings are small, and irrigation is widely practiced. The three most important food crops—rice (1947: 48,344,000 metric tons), wheat (21,528,000 metric tons) and millet—occupy about 70 percent of the cultivated area. The range of crops is wide. In the north, wheat, barley, corn, sorghum, millet and other cereals, and beans and peas predominate, whereas in the south, rice, sugar and indigo are most important. The Yangtze basin, one of the most favored agricultural regions in the world, is China's premier granary. Tea, the chief beverage, is grown mainly in the central uplands, coastal ranges and Szechwan.

Silkworm culture is practiced widely, especially in the lower Yangtze valley. Cotton, the major purely industrial crop, runs from 2,500,000 to 4,000,000 bales a year. Soybeans are of ever-increasing importance. Other crops include fibers, tobacco, vegetable oils, cane sugar and many medicinal plants and spices.

The urgent need for subsistence crops has confined grazing grounds for sheep and cattle to the dry northwest and to mountain pastures. However, such animals as goats, poultry and especially pigs are raised everywhere.

INDUSTRY. Industrially, China is still in its infancy. Development has been mainly in the erection of textile mills, silk and flour mills, match factories, tanneries and a few steel and cement mills. The production of consumer's goods far exceeds that of producer's goods, which must still be imported. Much of the industry which had been developed in the lower Yangtze valley and the Shanghai area was moved westward in 1938 and 1939 to escape Japanese capture.

Industrial rehabilitation continued at a slow pace in 1948 because of the high cost of labor and materials, high interest rates,

power shortages and the unsettled political situation. Limited U. S. aid was received under terms of the Foreign Assistance Act of 1948, which allotted \$338,000,000 for reconstruction and relief purposes during the year 1948-49; \$125,000,000 for military aid.

TRADE. Foreign trade statistics, in billions of Chinese dollars, are as follows:

	1946	1947
Exports	420	6,432
Imports	1,909	14,395

In 1947 the U. S. supplied 50.2% of China's recorded imports, followed by India, 9.0%; Britain, 6.9%; Canada, 3.8%; and Iran, 3.7%. Of the exports 34.2% went to Hong Kong (for re-export), 23.3% to the U. S., 6.6% to Britain, 5.1% to Aden and 3.2% to India.

The export program has been seriously handicapped by disrupted transportation facilities, continued civil war and heavy currency inflation.

COMMUNICATIONS. Exploitation of many of China's natural resources has been handicapped by the lack of internal communications. There is an extensive system of inland waterways and canals, however, and in central and south China most of the freight is carried by water.

The modern highway system now totals about 100,000 miles, but at least a third of the system is in need of extensive repairs. The railway system, totaling about 18,000 miles, is concentrated in the lower Yangtze basin and in north China and Manchuria. More than one-third of the mileage was wrecked or wholly inoperative in 1948 because of Communist activity. The principal port, Shanghai, at the mouth of the Yangtze, normally accounts for about 50 percent of the total maritime customs revenue, and is the Far East's major port.

FINANCE. China continues to suffer from inflation. The budget for the first half of 1948 placed expenditures at 96 trillion Chinese dollars (U. S. \$427,000,000), expenditures for the second half were estimated at 323 trillion dollars, and the announced deficit for 1947 was U. S. \$296,600,000. Only about a third of the budget is met from revenue. China's wartime loans totaled \$1,345,080,568, and from V-J day to July 15, 1947, the total stipulated amount of U. S. aid was \$1,240,450,000.

TOPOGRAPHY. China has about $1\frac{1}{4}$ times the area of the continental United States. Its coast line is roughly a semi-circle, about 2,150 miles long. The greater part of the country is mountainous, and only in the lower reaches of the Hwang Ho and Yangtze Kiang are there extensive low plains. The principal mountain ranges are the Tien Shan, to the northwest; the Kunlun chain, which attains a maximum height of 23,890 feet, running south of the Takla Makan and Gobi Deserts; and the

Trans-Himalaya, connecting the Kunlun with the borders of China and Tibet. Manchuria is largely an undulating plain connected with the north China plain by a narrow lowland corridor. Inner Mongolia contains the relatively fertile southern and eastern portions of the Gobi. The large island of Hainan (13,500 sq. mi.) lies off the southern coast.

HYDROGRAPHY. China proper consists of three great river systems. The northern part of the country is drained by the Hwang Ho (Yellow), 2,700 miles long and mostly unnavigable. The central part is drained by the Yangtze Kiang, the fifth longest river in the world (3,100 mi.). The Si Kiang in the south is about 1,650 miles long and navigable for a considerable distance. In addition, the Amur forms part of the northeastern boundary.

MINERALS. Mineral resources are considerable. Iron ore, far less plentiful than coal, is mined principally in the lower Yangtze valley and in north China. Tin, mined in Yunnan and southwest Szechwan, is the major mineral export. Of some rarer minerals, notably antimony and tungsten, China is normally the world's leading producer. Lead, zinc, silver, mercury and gold are also mined. Mineral production in 1946 was as follows: coal, 11,468,000 metric tons; tungsten, 2,700 metric tons; petroleum, 510,000 barrels; mercury, 130,000 lb.; tin (1945), 2,000 metric tons; iron ore, 1,440,000 metric tons.

FORESTS AND FISHERIES. China urgently needs reforestation. Most remaining forests are on inaccessible mountain slopes. Bamboo is cultivated in groves throughout the country south of the Tsinling mountains. Both sea and river fisheries are rich and varied, and fresh or salted fish is a staple food in many districts. The coastal fisheries of Shantung, Chekiang and Kwantung are especially valuable.

CLIMATE. There are great diversities of climate. North China has the coldest winters in the world for its latitude (23.5° average in January at Peiping). The Yangtze valley is warmer, with winter temperatures more like those of Britain, while the south has warm subtropical winters. Summer temperatures are uniformly hot throughout China (about 79° in July at Peiping and 82° at Hong Kong). South China receives regular rainfall averaging from 40 to 60 inches annually, but in the north rainfall is irregular and not as heavy; droughts and floods are common.

Chinese Outer Territories

MANCHURIA—Status: Integral part of Republic of China, almost entirely occupied by Chinese Communist forces in 1948.

Area: 503,143 square miles.

Population (est. 1940): 43,233,954.

Chief exports: soya beans, bean cake, coal, millet, sorghum, corn.

Agricultural crops (1940, in short tons): soya beans, 4,200,000; sorghum, 4,850,000; millet, 4,300,000; maize, 3,400,000; wheat, 890,000; rice (1946) 15,000,000 bushels.

Industries: iron and steel, machinery, textiles, food processing, chemicals.

Minerals: coal, iron ore, gold, lead ore, manganese ore.

Manchuria includes the three northeastern provinces of China—Fengtien, Kirin and Heilungkiang (now divided into nine provinces)—which before the Japanese invasion of 1931 were governed apart from China proper. A separate state (Manchukuo) set up under Japanese sponsorship was never recognized by China, the United States or Britain. The regime was a transparent screen for Japanese control exercised by the Kwantung army. The Japanese hold on Manchuria was broken by the Soviet invasion of August, 1945.

The decision reached at the Cairo conference (1943) that Manchuria should revert to Chinese possession was confirmed by the Chinese-Soviet treaty signed Aug. 14, 1945. Soon after the Japanese surrender, however, Chinese Communist troops moved into the country and continued to control most of northern and central Manchuria after the Soviet evacuation. By 1947, Chinese Government troops held only the southern coast line, except Port Arthur and Dairen, and a salient between Changchun and Harbin. A Communist offensive late in that year reduced this salient and severed communications between Nationalist strongholds.

As a result of extensive Japanese development, Manchuria became probably the richest industrial area in China, containing about two-thirds of her heavy industry and half her railway mileage. Industrial activity is still retarded by the wide-scale Soviet removal of key industrial equipment and by destruction resulting from the civil war.

Manchuria is also a rich agricultural region with a cultivable area estimated at 70,000,000 acres. Lumber from the forests of the East Manchurian Highlands ordinarily supplies the needs not only of the Manchurian plain but also of North China.

FORMOSA (TAIWAN)—Status: Province (Part of Republic of China).

Area: 13,836 square miles.

Population (1946): 6,250,703.

Governor: Wei Tao-ming.

Capital: Taipei (Taihoku) (326,407).

Chief exports (almost entirely to China after World War II): sugar, coal, tea, cement.

Agricultural products: sugar cane, rice (1946: 54,000,000 bushels), sweet potatoes, bananas, pineapples, tea.

Industries: sugar refining, canning, cement, chemicals, wood, paper.

Minerals: gold, coal (1942: 1,084,104 metric tons), petroleum, silver, sulfur.

Formosa is a large island in the western Pacific, separated from China to the west by the Taiwan straits (narrowest point, 90 mi.). The Pescadores (Bokoto) (about 77 sq. mi.) and other outlying islands became administratively a part of Formosa under Japanese rule. Formosa, ceded to Japan in 1895 after the Chinese-Japanese War, remained Japanese until it was restored to China in 1945, in accordance with the Cairo declaration of 1943.

Most of the inhabitants are of Chinese stock. There are also about 150,000 aboriginal tribesmen in the mountainous interior. Sugar cane, grown under the plantation system, is the most prosperous of the island's developments.

Formosa is one of the world's chief sources of camphor, and government monopolies of camphor, salt, opium and tobacco have been established. Forest resources are enormous. Railway mileage (1939) totaled 2,503, and roads 10,000.

SINKIANG (CHINESE TURKESTAN)—Status: Chinese province.

Area: 705,969 square miles.

Population (est. 1946): 3,870,954.

Capital: Tihwa (Urumchi) (20,000).

Governor: Masud Sabri.

Chief exports: wool, cotton, furs, skins, sheep, cattle, horses.

Agricultural products: wheat, corn, rice, cotton, sorghum, beans, fruit.

Minerals: jade, gold.

Largest and most remote of China's provinces. Sinkiang experienced violent Mohammedan uprisings after 1932. The Chinese governor, Gen. Shen Shih-tsai, re-established order in 1937 with Soviet support. In 1943, Russian troops withdrew, taking with them all their economic installations, and the province now has considerable local autonomy. Several Communist-inspired disturbances occurred in 1947 and 1948.

Chinese constitute about 5 percent of the population; there are 14 other ethnic groups, mostly Turki tribes of the Sunni Moslem faith. The Mongol tribes are Lama Buddhists. There are vast stretches of desert and arid land, and the limited area under cultivation is mostly in oases and river valleys. The northern slopes of the Tien Shan range, which divides the province from east to west, provide rich summer grazing lands. There were in 1943, 11,720,000 sheep, 870,000 horses, 1,500,000 cattle and 90,000 camels.

Almost all of the limited foreign trade is conducted with Russia. Some caravan trade is carried on over the high passes which separate Sinkiang from India. There are no railroads, but 2,440 miles of road were built during 1932-42. An air route from Chungking to Moscow crosses the province, with stops at Tihwa and Hami. The largest towns are Shufu (Kashgar) (80,000) and

Soche (Yarkand) (70,000), both near the western border. About 85 percent of the population lives in the western side of the province, adjacent to the Soviet Union and separated from China by desert.

TIBET—Status: Under nominal Chinese suzerainty but politically independent.

Area: 469,294 square miles.

Population (est. 1946): 3,772,061.

Capital: Lhasa (50,000).

Ruler: The 14th Dalai Lama (Lingerh Lamutan-chu).

Monetary unit: sang.

Exports: wool, live animals, salt, hides, borax, tea, musk.

Agricultural products: barley, fruits, pulse, vegetables.

Minerals: borax, salt, coal, gold.

Tibet, north and northwest of the Himalayas, is the highest country in the world, averaging 16,000 feet in elevation and having many peaks ranging up to more than 25,000 feet. Chinese suzerainty over Tibet was established in the 18th century. The area was invaded by a British expeditionary force in 1904, but the Anglo-Russian Convention of 1907 recognized China's influence and stipulated that neither Russia nor Britain should interfere in Tibet's affairs.

Chinese representatives were expelled in 1911-12, but in recent years Chinese-Tibetan relations have improved. The government is a theocracy, ruled by the Dalai Lama (born in 1933), who acts through a regent or minister appointed from among chief lamas.

The religion and predominant factor in Tibet's social system is Lamaism, a late form of Buddhism modified by animism and primitive magic. Education is in the control of the many monasteries, some of which have more than 1,000 monks. A large number of the population are lamas, mostly celibates. Both polyandry and polygyny are practiced.

Some agriculture and herding is possible in the valleys.

KWANGTUNG—Status: Chinese territory under Soviet occupation.

Area: 1,444 square miles.

Population (est. 1938): 1,750,000.

Kwangtung, at the southern end of Manchuria's Liaotung peninsula, was leased to Russia by China in 1898. The lease was transferred in 1905 to Japan, which administered the territory until the end of World War II. The Chinese-Soviet treaty of 1945 provided for the return of the territory to China and for joint control of the naval base of Port Arthur; Dairen was to be a free port. Thus far, however, the Soviet Union has refused to honor these provisions of the treaty and has retained sole control of the area.

Port Arthur has an excellent ice-free, deep-water harbor which gives it great strategic importance. Dairen, the principal city (pop. 533,696), also has an ice-free harbor. Both Dairen and Port Arthur are connected with the Manchuria railways.

Colombia (Republic)

(República de Colombia)

Area: 439,714 square miles.

Population (est. 1947): 10,545,000 (mestizo, 68%; white, 20%; Indian, 7%; Negro, 5%).

Density per square mile: 23.9.

President: Mariano Ospina Pérez.

Principal cities (est. 1945): Bogotá, 443,520 (capital); Medellín, 219,790 (mining); Barranquilla, 206,630 (chief port); Cali, 135,610 (coffee, mining).

Monetary unit: Peso.

Language: Spanish.

Religion: Roman Catholic.

HISTORY. Colombia, nearly nine times the size of New York state, is the only country in South America with frontage on both the Pacific and the Caribbean. Its northern coast was one of the first parts of the Americas to be visited by Spanish explorers. Darien, the first permanent European settlement on the American mainland, was founded in 1510, Santa Marta in 1525, and Bogotá in 1538.

New Granada, as Colombia was called until 1861, was comparatively neglected during the Spanish colonial era. After winning independence from Spain during a fourteen-year struggle ending in 1824, the country established a republic in 1831, including the area that now is Panamá. Intermittent civil war plagued Colombia until 1903, when Panamá, with United States backing, seceded from the republic.

The century-old boundary dispute with Peru over Leticia almost led to war in 1931, but a settlement was arranged through the League of Nations in 1934-35.

The administration of Alfonso López, Liberal president in 1934-38, introduced constitutional and labor reforms and the removal of state protection for the Roman Catholic Church. López won the presidency again in 1942 but resigned on Aug. 7, 1945. The provisional president, Alberto Lleras Camargo, was also a Liberal, but when the Liberal party split again in the elections of May 5, 1946, Mariano Ospina Pérez, a Conservative, won. The Liberals, however, retained control of Congress.

Bogotá, host at the time to the Ninth International Conference of American States, was swept by a destructive but unsuccessful revolt on April 9, 1948, following the assassination of Jorge Eliécer Gaitán, extremist Liberal leader.

GOVERNMENT AND DEFENSE. Colombia's

president, who appoints his own cabinet, is elected every four years and is not eligible to succeed himself immediately. The Senate—upper house of Congress—has 63 members elected for four years by direct vote. The House of Representatives of 123 members is directly elected for two years. All male citizens over 21 may vote.

A term of military service is compulsory for men between twenty-one and thirty. The strength of the army in 1948 was unofficially reported at 14,000. With 1,500 personnel, the navy has two modern destroyers, three sea-going gunboats, three patrol craft, four river gunboats and several motor launches.

SOCIAL AND ECONOMIC CONDITIONS. Primary education is free and technically compulsory in Colombia, whose last published illiteracy figure was 48.4 percent. By law, 10 percent of the national budget goes for education. In 1945, 12,147 primary schools reported enrollment of 788,143 pupils, and 1,830 secondary schools reported 94,669 students (1,421 primary and 606 other schools did not report). In addition to the National University, founded at Bogota, 1572, there are four departmental universities and several private ones.

Because of the former isolation of the interior, the language and manners in Bogotá are more purely Castilian than anywhere else in South America. The white race retains its social and economic dominance over Indians and Negroes, but race mixture is steadily reducing its numbers. In recent years, notably since adoption of a new labor code in 1944, the working classes have made important gains, including minimum wages, vacations and holidays, accident and sickness benefits, and the protected right of union organization.

Most of the people live by farming and cattle herding, but only a small part of the land is cultivated, and that by primitive means. Colombia's coffee, by far the principal crop, is a mild variety that does not compete with Brazilian types. Production in 1946-47 was 6,500,000 bags of 132 pounds each. Other crops include bananas, coconuts, tobacco, sugar cane, corn, cotton, cacao, beans, rice, tropical fruits and, in the temperate regions on plateaus and in mountain valleys, cereals and potatoes. Cattle in 1946 were estimated at 13,000,000 head, according to U.N. statistics.

The leading manufacturing industries are foodstuff processing, textiles and beverages. In 1945 there were 7,853 factories employing 135,400 workers.

To protect foreign trade balances, the government has taken over control of exports and imports. Trade statistics, in millions of pesos, are as follows:

	1938	1946	1947
Exports	144	352	444
Imports	159	403	596

In 1946 the U. S. took 78% of the exports and supplied 63% of the imports. The leading export was coffee, followed by petroleum, platinum and gold.

Difficult terrain makes Colombia's rail and road building costly. Rail mileage, including many short feeder lines, was put at 2,056 in 1945; and highway mileage at 42,700, about 18 percent improved. Air transit, however, is well advanced, and there are 4,620 miles of navigable waterways. The national merchant marine service has been combined with those of Venezuela and Ecuador.

Colombia's proposed 1948 budget provided for expenditures of 320,500,000 pesos. The external debt on Dec. 31, 1946, amounted to 438,000,000 pesos. British investments on Dec. 31, 1947, were \$5,441,475, and U. S. direct investments in 1940 were \$111,616,000.

TOPOGRAPHY, NATURAL RESOURCES AND CLIMATE. Through the western half of the country, three Andean ranges run north and south, merging into one at the Ecuadorean border. The eastern half is a low, jungle-covered plain, drained by spurs of the Amazon and Orinoco, inhabited mostly by uncivilized Indians.

Colombia's mountain ranges have many lofty peaks, including Hulla, 18,700 ft., and Tolima, 17,109 ft. The fertile plateau and valley of the eastern range is the most densely populated part of the country.

Rich in minerals, Colombia has the fifth largest oil industry in Latin America (70 percent controlled by U. S. interests). Production in 1947 was 24,966,000 barrels. The country is also rich in platinum and has world-famous emerald mines at Muzo in the eastern Andes. Mineral production includes crude platinum (1946: 43,800 fine ounces), gold (1947: 418,457 ounces) and silver (1945: 170,000 ounces).

Colombian forests, covering a large part of the country from the western Andes to the eastern plain, are a great but little exploited source of wealth. Products include vanilla, quinine, ipecac, sarsaparilla, gums and balsams, tanning agents, dyewoods, hardwoods and rubber.

Alligators along many of the large rivers are hunted for hides. The rivers and lakes abound with fish and turtles, a source of commercial tortoise shell.

Although Colombia lies almost entirely in the north torrid zone, its climate is tempered by prevailing winds and high altitudes in the western, mountainous area. High temperatures and excessive moisture prevail in the lower areas, along the coast and in the larger river valleys. The dry season occurs in summer.

Costa Rica (Republic)

(República de Costa Rica)

Area: approximately 23,000 square miles.

Population (est. 1947): 799,501 (white and mestizo, 97%; Negro, 2%; Indian, 1%).

Density per square mile: 34.7.

Executive: 11-man junta headed by José Figueres.

Principal city (est. 1947): San José, 86,952 (capital and only large city).

Monetary unit: Colón.

Language: Spanish.

Religion: Roman Catholic.

HISTORY AND GOVERNMENT. Costa Rica was discovered and probably named by Columbus in 1502. A Spanish province as early as 1530, it proclaimed its independence in 1821, and was a member of the Central American Union from 1823-38. Aside from boundary disputes with Panamá and Nicaragua, Costa Rica's modern history was comparatively tranquil until the spring of 1948, when a brief civil war followed congressional annulment of presidential elections in which Otilio Ulate defeated the Government-sponsored candidate. Leftist-supported government forces surrendered on April 20, and on May 8 an 11-man junta assumed control of the nation pending the drafting of a new constitution by a Constituent Assembly scheduled to be elected on Dec. 8, 1948.

Under the old constitution, the President and one-house Congress were elected popularly for four years.

Military service is voluntary. There is an army of 500 men, a police force of 1,000, and 700 coast guards.

SOCIAL AND ECONOMIC CONDITIONS. Costa Rica's illiteracy rate of approximately 15 percent is the lowest in Central America, with elementary education free and compulsory. In 1947, a total of 868 primary schools had 77,300 students. The 50 intermediate schools had more than 7,000 students in 1944, and the National University at San José, more than 800. Since 1944, English has been taught in all primary schools.

Coffee, bananas, abacá fiber and cacao are the basic products of Costa Rican agriculture, which is characterized by the prevalence of small land holdings. Cotton, sugar cane, tobacco, corn, beans, rice and potatoes are subsidiary crops. Cattle are raised mainly for dairying.

Manufacturing is virtually limited to locally-consumed products, chiefly furniture, fine woodwork and tobacco.

Coffee normally represents more than half the country's export trade; exports in 1946 were 252,025 bags. Bananas, cacao and abacá fiber are the other main exports. Principal imports are cotton, oil, machinery, rail equipment, autos and iron prod-

ucts. Exports in 1946 totaled \$14,337,272 (73.8% to the U. S.) and imports, \$33,041,135 (76.6% from the U. S.). In 1942, the rail system totaled approximately 450 miles; improved highways, 771 miles.

In recent years Costa Rican expenditures have exceeded revenues, and the general government financial position is unfavorable. The deficit for 1946 was 15,703,902 colones, and the public debt in that year totaled 245,701,335 colones.

Gold (1945 exports: \$96,659) is the most valuable mineral, although silver, manganese, mercury and sulfur also exist. Oil indications have been found in the south. The mountain slopes yield such forest products as balsa, cedar, dyewood, mahogany and rosewood. The fisheries along the coast are valuable; tuna, shark-livers and live turtles are important products.

TOPOGRAPHY AND CLIMATE. Most of Costa Rica is elevated tableland, from 3,000 to 6,000 feet above sea level, with sharp slopes to the Caribbean and Pacific. Cocos Island, about 300 miles off the Pacific Coast, is under Costa Rican sovereignty; although it is mostly tropical jungle, it is of potential strategic importance in the defenses of the Panama Canal.

The weather is cool and refreshing in the Costa Rican highlands, with average temperatures of 68°, and San José is increasing in importance as a tourist resort. Along the coasts, the mean annual temperature is about 82°. The rainy season is usually from April or May to December.

Cuba (Republic)

(República de Cuba)

Area: 44,217 square miles.

Population (est. 1947): 5,129,686 (white and mulatto, 75%; Negro, 24%; Mongoloid, 1%).

Density per square mile: 116.0.

President: Carlos Prío Socarras.

Principal cities (census 1943): Havana, 659,883 (capital, industrial center); Santiago de Cuba (1946 est.) 152,000 (seaport, mining); Marianao, 120,163 (suburb of Havana); Camagüey (1946 est.) 87,009 (cattle, sugar); Matanzas, 54,844 (seaport, sugar).

Monetary unit: Peso.

Language: Spanish.

Religion: Roman Catholic.

HISTORY. The history of Cuba, largest of the many Caribbean islands, began for white men with discovery by Columbus on his first voyage in 1492. It was a Spanish colony until 1898, except for brief British occupancy in 1762-63. Open war raged between Cuban rebels and Spanish troops from 1867 to 1878. Fighting broke out again in 1895, and when the United States threatened to intervene, Spain felt its national dignity had been wounded.

Strained relations between Spain and the U. S. led to war when the U. S. battleship *Maine* was blown up in Havana harbor in Feb., 1898. At the end of the brief Spanish-American War, Spain gave up Cuba.

Until creation of the Cuban republic in 1902, the island was ruled by United States military authorities. For the first thirty-two years of the republic's life, the United States held the right to intervene in any crisis—a right which was invoked during insurrections in 1906, 1912 and 1917.

Corruption bedeviled Cuba after World War I, particularly during the eight-year presidency of Gerardo Machado, who was ousted in a 1933 revolution. Five different presidents tried to rule in the next few months; out of this political whirligig came the dictatorship of Fulgencio Batista, who climbed almost overnight from army sergeant to army commander-in-chief. In 1940 Batista legalized his reign by being elected to a four-year presidential term. He was succeeded in 1944 by Dr. Ramón Grau San Martín, backed by the Republicans and his own *Auténtico* party. Carlos Prío Socarras, government-sponsored candidate and strong anti-Communist, was elected president June 1, 1948, for a 4-year term beginning October 10.

GOVERNMENT. Cuba's president is elected for a 4-year term by direct popular vote, in which women take part. The Cabinet, though named by the president, is responsible to the Congress—a 54-member Senate and a 136-member House, both elected for four years. Much Cuban lawmaking is done through presidential decree, reviewable by the Supreme Court. Cuban politics are dominated by personalities, and there are frequent shifts in political grouping.

Compulsory military service was established in 1942. The army numbers about 15,000; the navy, 3,000, manning some twenty small coastal craft. The air force has 50 combat planes. Two U. S. air bases and one naval base built in World War II at a cost of more than \$30,000,000 were turned over to Cuba in 1946. However, the United States retained its long-held naval base at Guantánamo.

SOCIAL AND ECONOMIC CONDITIONS. Education is free and compulsory from 7 to 14. Schools numbered about 5,400 in 1946, enrolling some 520,000 pupils. Literacy was estimated at close to 70 percent.

Recent social legislation has effected a 44-hour week, a month's vacation for each eleven months worked, and compulsory maternity and accident insurance. The proportion of unionized workers is the highest in Latin America.

Half of the employed are engaged in agriculture, which normally accounts for more than 90 percent of the exports. Often jolted by fluctuations in the price of sugar,

of which it produced a record 6,448,320 short tons in 1947, Cuba is now seeking to vary its agricultural production. About two-thirds of the cultivated area is devoted to sugar cane. Other important crops are tobacco (1946-47: 65,000,000 lbs.); coffee (1946-47: 545,000 bags); cacao, fruits, vegetables, henequen, corn, pineapples and beans. The livestock and dairy industry has progressed greatly in the last two decades.

Manufactured products include sugar, molasses, syrup, brandy, rum, alcohol, cigars, cigarettes, cigar boxes, sponges, cement, cordage, salt, dressed hides, dairy products and canned goods. The leading industry is the processing of sugar cane and its products.

Foreign trade statistics, in millions of pesos, are as follows:

	1938	1946	1947
Exports	143	476	746
Imports	108	307	520

In 1947, the U. S. absorbed two-thirds of exports and supplied 83.9% of the imports. Other leading customers were Britain, 17.8%, and Canada, 2.9%. Sugar accounted for four-fifths of the exports, followed by tobacco.

Railways in 1945 were estimated at 4,880 miles, plus 7,035 miles of private lines on sugar estates. In 1942 there were 2,390 miles of improved highway, and about 2,000 miles of unimproved roads. Domestic airlines are operated by the Cuban National Aviation Company, a Pan American subsidiary.

The preliminary estimate of the 1947 budget, regular and extraordinary, was 190,000,000 pesos, the highest in Cuban history. Actual revenue in 1945 was 177,126,189 pesos. The public debt on Aug. 31, 1946, totaled 180,412,075 pesos. Extra-budgetary expenditures have been heavy recently. American direct investments in 1940 came to \$559,797,000, and British investments on Dec. 31, 1947, to £27,344,097.

TOPOGRAPHY, NATURAL RESOURCES AND CLIMATE. Long, narrow Cuba has maximum dimensions of 730 by 160 miles, and is approximately the same size as Pennsylvania. It has mountainous areas in the southeast, central area and west, but the rest is flat or rolling. The coastline of more than 2,100 miles is indented by many large bays. Cuba's numerous short rivers are of slight importance commercially.

Rich mineral beds, mostly in the eastern province of Oriente, include iron, copper, manganese, chromium and nickel. Iron ore reserves, estimated at 3,500,000,000 tons, are 90 percent held by U. S. steel interests. Virtually all mineral exports go to the United States.

Cuba has an estimated 3,500,000 acres of wooded land, with valuable cabinet woods,

such as cedar and mahogany, as well as fibers, resins and oils. Lobsters, oysters, crabs and shrimp are major sea food products. About 1,000,000 lbs. of lobster valued at \$585,811 were exported in 1945.

The tempering influence of the trade winds on the island's tropical climate makes Havana's average temperature 77°, with a range of only 10° (71° to 81°). The dry season lasts from November to April, and the warmer wet season occurs thereafter. Mean annual rainfall at Havana is about 50 inches.

Czechoslovakia (Republic)

(Československa Republika)

Area: 49,321 square miles (excluding Ruthenia).

Population (est. 1947): 12,164,631; (Czech, 67.0%; Slovak, 23.7%; German, 3.2%; Magyar, 3.2%; Polish, Jewish and others, 3.9%).

Density per square mile: 246.6.

President: Klement Gottwald.

Premier: Antonín Zapotocký.

Principal cities (est. 1947): Prague (Praha), 921,416 (capital, industrial center); Brunn (Brno), 272,760 (textiles); Ostrava (formerly Moravská Ostrava), 181,181 (iron and steel); Bratislava, 172,664 (Danube port); Pilsen (Píseň), 118,152 (Skoda steel works).

Monetary unit: Koruna.

Religions (1930): Roman Catholic, 73.54%; Protestant, 7.67%; Czechoslovak Church, 5.39%; Greek Catholic, 3.97%; Jewish, 2.42%; others, 7.01%.

HISTORY. Few nations have had a more tragic history than Czechoslovakia, which has twice won and lost its independence within 30 years. Born out of World War I, the young republic was an early victim of Nazi aggression in 1938-39. At its rebirth in 1945 following World War II, it enjoyed a measure of its traditional democracy under the shadow of Soviet control. During the next three years Czechoslovakia made by far the greatest economic progress of all the Soviet satellites, but the government was subjected to increasing Communist pressure, climaxed in the spring of 1948 by the Communists' seizure of complete control and the resignation of President Beneš.

It was probably about the 5th century, A.D., that the ancestors of the Czechs and Slovaks settled in the region of modern Czechoslovakia. Slovakia passed under Magyar domination, but the Czechs founded the kingdom of Bohemia, which was among the most powerful in Europe for centuries. German encroachment began in the 12th century and was furthered by the election in 1526 of a Hapsburg as Bohemian king. After the Czechs rebelled in 1618 and were defeated at the Battle of White Mountain in 1620, they were ruled for the next 300 years by the Hapsburgs as part of the

Austro-Hungarian Empire. In World War I, Czech patriots, notably Thomas G. Masaryk, went abroad to promote support for Czech independence, while Czech legions fought against the Central Powers. On Oct. 28, 1918, Czechoslovakia proclaimed itself a republic; shortly thereafter Masaryk was unanimously elected first president.

Between World Wars I and II, Czechoslovakia supported the League of Nations, formed the Little Entente with Yugoslavia and Rumania, and cooperated closely with France. President Masaryk resigned in 1935, two years before his death at the age of eighty-seven, and was succeeded by Dr. Eduard Beneš.

Meanwhile, the German plan of aggression was under way. Czechoslovakia's German minority, led by Konrad Henlein, began demanding autonomy. The government granted many concessions which, of course, were not enough to suit the Germans. The beginning of the end came at the Munich conference on Sept. 30, 1938, when France and Britain agreed that the Nazis could take the Czech Sudetenland on the German border. Dr. Beneš resigned on October 5, and Czechoslovakia became a federal union in the German orbit. The Poles, in the meantime, had seized Czechoslovakia's Teschen area, and Hungary had taken areas in Slovakia and Ruthenia. In March, 1939, the Nazis set up Slovakia as a puppet state, declared Bohemia and Moravia to be Nazi protectorates, and gave Hungary the remainder of Ruthenia. Both Slovakia and Bohemia-Moravia were occupied by German troops.

Czechoslovakia suffered cruelly under Nazi occupation, but Czech patriots were not deterred from widespread sabotage and slowdowns which hindered the Germans. Meanwhile, Dr. Beneš had organized a government-in-exile in London in 1940, with Jan Šrámek as Premier and himself as President. Soon after the government returned to Czechoslovakia in April, 1945, Ruthenia, the easternmost province, was ceded to Russia.

A 300-member Constituent Assembly elected on May 26, 1946, had 114 Communist members, and on July 3, 1946, Communist Klement Gottwald formed a six-party coalition cabinet. Amid increasing pressure from Moscow, Gottwald's cabinet remained in office until the bloodless coup d'état of Feb. 23-25, 1948, when the Communists seized complete control of the republic. As they took over, Foreign Minister Jan Masaryk, son of the founder of Czechoslovakia, committed suicide. President Beneš stayed on until June 7, when he resigned following parliamentary elections in which the Communists and their allies were unopposed. Parliament elected Gottwald to the presidency, and Communist Antonín Zapotocký succeeded to the premiership. Beneš died Sept. 3, 1948.

GOVERNMENT AND DEFENSE. Czechoslovakia's new Soviet-type constitution, promulgated June 8, 1948, makes the 300-member unicameral Parliament the supreme organ of the state with control over courts and civil service. The government is headed by the president, elected by Parliament for a seven-year term, and the prime minister and his cabinet who are appointed by the president but are responsible to Parliament. The constitution contains nominal guarantees of civil liberties and provides that the state shall conduct all economic activity in the public interest on the basis of a single economic plan. Provision is made for limited Slovak autonomy under an elected council of 100 members.

The army, based on a cadre of Czech units which fought with the Red Army during World War II, has been trained and equipped by the Soviet Union with organization and armament on its pattern. Estimated strength is 160,000, including police.

SOCIAL AND ECONOMIC CONDITIONS. Illiteracy is low in Bohemia, higher in Slovakia. In 1946, there were 14,817 elementary schools with 1,528,081 students; 261 secondary schools with 101,730; 1,205 vocational schools with 284,122; and 15 colleges and universities with 56,631.

One of the country's greatest problems is the ethnic variety of its population. In view of the traitorous role played by German and Hungarian minorities in the disintegration of Czechoslovakia in 1938-39, the government decided to expel them from the country. Many Hungarians, however, still remained in 1948.

Economic nationalization neared completion in 1948. Decrees issued on Oct. 24, 1945, ordered the nationalization of almost all industrial corporations with more than 500 employees. All national resources, public utilities, transport, commercial banks and insurance companies became state property. Other laws enacted April 28, 1948, nationalized all enterprises employing more than 50 as well as concerns of any size operating in key industries.

Distribution of large estates had already been accomplished following World War I by the 1919 Land Reform Law, which made it illegal for one person to own more than 370 acres of arable land. The social insurance system covers accident, sickness, disability, old age and death.

According to the last census, 34.64 percent of the employable population was engaged in agriculture, 34.94 percent in industry, 7.43 percent in commerce, 5.53 percent in transportation and 4.86 percent in public service and the professions.

In 1945 about 41 percent of the total area was arable, 31 percent forest, and 15 percent meadows and pastures. Sugar beets (1947: 2,406,559 metric tons), wheat (853,601 tons), corn and high-grade barley and

hops for beer-brewing are cultivated in the low-lying areas. In more elevated regions the cultivation of potatoes (1947: 4,667,861 tons), rye (987,607 tons) and oats predominates. Higher lands are also used for growing fodder crops or for grazing. The livestock census of 1947 enumerated 3,974,851 cattle, 2,944,447 hogs, 1,605,611 sheep and 26,135,555 poultry.

The highly developed position of Czech industry is important in foreign trade, since production far exceeds domestic needs. Agricultural products, led by sugar, provide raw materials for important industries. The beer industry has attained world-wide repute, and there are also spirits, malt and foodstuffs industries. Abundance of coal and presence of iron ore give the country a big metallurgical industry. Output of raw steel in 1947 was 2,285,700 metric tons; of pig iron, 1,422,500 tons. The Skoda steel works at Pilsen are one of the largest in Europe.

Other industries are glass, porcelain and pottery making, while large forest areas provide raw material for the timber, paper and cellulose industries. Also highly developed are the textile industries, including cotton, wool, flax and jute production, and the shoe industry. The famous Bat'a shoe factories are at Zlín. Industrial employment totaled 1,086,500 on Dec. 31, 1946.

Foreign trade is now a state monopoly managed by government corporations. Statistics, in billions of koruny, are as follows:

	1937	1946	1947
Exports	11.92	14.34	28.55
Imports	10.93	23.24*	28.92

*Including relief shipments.

Leading exports in 1947 were iron and steel manufactures (15.8%), glass (9.4%), sugar (7.0%), machinery (7.0%) and vehicles (5.4%). Chief imports were cotton and cotton products (8.4%), wool and wool products (8.2%), and tobacco (7.3%). Leading customers were Switzerland (10.2%), Netherlands (8.7%), Sweden (7.2%), Great Britain (6.4%) and Belgium (6.3%). The chief suppliers were Great Britain (11.6%), the U. S. (10.2%) and Switzerland (7.6%). Reorientation of trade from west to east is now in progress.

The disadvantages of Czechoslovakia's landlocked position are offset somewhat by a well-developed system of internal communications. Czech railroads, totaling 8,200 miles in 1947, form a direct connection between the systems of eastern and western Europe, making the country an important communications center. Highway mileage in 1945 totaled 43,623.

Navigable streams total 1,156 miles in Bohemia-Moravia, and 111 miles in Slovakia. Internal waterways and rivers connect Czechoslovakia with the Black Sea and the North Sea.

Government expenditures in 1948 were estimated at 74,700,000,000 koruny as against revenues of 56,900,000,000 koruny, of which an estimated 15 percent was from government enterprises. National debt (Dec. 31, 1947); internal, 107,669,000,000 koruny; external, 18,805,000,000 koruny.

Most important of Czechoslovakia's varied minerals are pit coal and lignite, with the principal coal fields in the Ostrava-Karvinná area, connected with the Polish fields of Upper Silesia. Production in 1947 was 16,215,800 metric tons of hard coal and 22,362,100 tons of lignite.

Production of iron ore in 1947 was 1,363,500 tons, but much ore is imported to meet the demands of Czechoslovakia's flourishing iron and steel industry. Excellent porcelain raw materials, particularly kaolin (1947: 607,553 tons), are obtained in western Bohemia and southern Moravia. Other minerals are antimony, gold, magnesite, oil, silver and zinc.

Czechoslovakia is one-third wooded and is one of the richest forest lands in Europe, with a high production of lumber.

TOPOGRAPHY AND CLIMATE. A long and narrow country, with a length of 594 miles from east to west and a width varying from 45 to 175 miles, Czechoslovakia lies athwart the great central European watershed between the Baltic, Black and North Seas. Mountains form several of its boundaries—the Carpathians by Poland on the northeast, the Böhmer Wald by Austria on the southwest, and the Erzgebirge and the Sudetens by Germany on the northwest and north. Many of the valleys are made fertile by the Danube, Elbe and Vltava (Moldau) rivers and their tributaries. The Elbe and Danube are usually icebound for six to eight weeks each year.

At Prague, in Bohemia, the average annual temperature is 48.2° (29.6° in January; 66.2° in July) and the average annual rainfall is 19.6 inches. The corresponding figures for Presov, in eastern Slovakia, are 46.8° and 25.6 inches. Heavy winter snowfall is common in the highlands.

Denmark (Kingdom)

(Kongeriget Danmark)

Area: 16,575 square miles.

Population (est. 1948): 4,168,700 (almost entirely Danish).

Density per square mile: 251.5.

Sovereign: King Frederick IX.

Prime Minister: Hans Hedtoft.

Principal cities (census 1945): Copenhagen, 731,707 (capital); Aarhus, 107,393 (shipping, commercial center); Odense, 92,436 (meat, dairy products); Aalborg, 60,880 (seaport).

Monetary unit: Krone.

Language: Danish.

Religion: Evangelical Lutheran (state).

HISTORY. Denmark—comprising a peninsula and 500 islands in the Baltic Sea—is a vast produce farm, less than half the size of Indiana. Because of its rich production of meat, butter and eggs, it suffered almost no material damage from German occupation in World War II. Needing the Danish food, the Nazis permitted the Danish farmers to continue producing, and when the war was over and much of Europe was a starving ruin, Denmark emerged as a land of comparative plenty. Its principal economic difficulty was a lack of foreign exchange, which still persisted in 1948.

A tiny nation today, Denmark once was powerful and feared. After conversion of the Danes to Christianity in the 9th and 10th centuries, Canute the Great, king of Denmark, conquered England in 1015. In the 12th and 13th centuries, under Kings Valdemar I and II, Denmark reached the zenith of its power. By the terms of the Union of Kalmar in 1397, the nation was united with Norway and Sweden. Sweden left the Union in 1520, but Denmark and Norway remained united until 1814. In the Napoleonic Wars Denmark picked the wrong side; when Napoleon was defeated, Norway was given to Sweden and Helgoland to Britain in 1814. Denmark lost again in 1864 when, after a war with Austria and Prussia, it lost Holstein, Schleswig and Lauenburg to Prussia.

The country, which had become a liberal constitutional monarchy in 1849, stayed neutral in World War I, after which a plebiscite returned to it a part of North Schleswig. In 1917 Denmark sold the Virgin Islands to the United States for \$25,000,000.

The Social Democrats, moderately socialistic, dominated Danish politics in 1924-26 and 1929-40 during an era marked by active participation in the League of Nations and close harmony with Norway and Sweden.

On May 31, 1939, eager for peace, Denmark signed a ten-year non-aggression pact with Germany. Less than a year later, on April 9, 1940, Germany invaded neutral Denmark. The British countered by occupying the Faeroe Islands and Iceland. Iceland declared its complete independence from Denmark in 1944, thus breaking a union which had existed since 1280.

To save the country from destruction, King Christian X accepted the German occupation without armed resistance, and the Danish policy became one of passive resistance against Hitler's attempts to form a "model protectorate." During 1944-45, the Danish underground became increasingly active and effective.

Following the German surrender in 1945, the Danes quickly took over their government again with Social Democrat Vilhelm Buhl as prime minister. Buhl resigned when his party lost ground in the national

elections of Oct. 30, 1945, and the King designated Liberal leader Knud Kristensen to form a new all-Liberal cabinet in Nov., 1945. Kristensen lost the confidence of the Folketing in Oct., 1947, as a result of his advocacy of a plebiscite in South Schleswig (Germany) looking toward annexation of at least part of the region to Denmark. The Social Democrats increased their plurality in the resulting elections, and on November 11, Hans Hedtoft was named prime minister.

King Christian X—revered symbol of Danish resistance in World War II—died April 20, 1947, and was succeeded by his elder son, Frederick.

RULER. Frederick IX, of the house of Schleswig - Holstein - Sonderburg - Glücksburg, Denmark's 49th king, was born March 11, 1899. In 1935 he married Princess Ingrid of Sweden, by whom he has three daughters. Succession is limited to the male line, and the heir presumptive is his brother, Prince Knud, born July 27, 1900. The King's uncle is King Haakon VII of Norway.

GOVERNMENT AND DEFENSE. Under the constitutional act of 1915, amended in 1920, Denmark is a constitutional hereditary monarchy. Legislative authority rests jointly with the king and the two-house Rigsdag. The 149-member Folketing (lower house) is popularly elected every four years but can be dissolved by the king at will. Members of the Landsting (upper house) are elected for eight years—56 by popular vote and 19 by the outgoing Landsting. The cabinet, presided over by the king, who designates the prime minister, is the highest executive power, dealing with all new bills and important measures.

The party lineup in the Folketing (elections of Oct., 1947) is Social Democrat 57, Liberal 49, Conservative 17, Radical Liberal 10, Communist 9, others 7.

Military service is compulsory. The army, numbering about 14,000, is being re-equipped with British assistance. One infantry brigade of 4,000 men is stationed in the British zone of Germany. In 1948 the navy had two destroyers, three torpedo boats and six under construction, three submarines, two frigates, a corvette and other smaller craft. Personnel numbers 4,000.

SOCIAL AND ECONOMIC CONDITIONS. Under the Danish system, schooling is compulsory from 7 to 14 and, for the most part, free. The famous popular high schools (*folkehøjskoler*) for adults number 54, all private but assisted by the state. The Royal University of Copenhagen, founded in 1479, has about 6,500 students and that of Aarhus about 1,000. Elementary schools in 1945 had 458,859 students; middle and secondary schools in 1940 had 67,064.

Social legislation is well advanced and provides for medical aid, poor relief, child welfare and workmen's compensation. The National Insurance Act requires everyone from 21 to 60 to belong to an approved sickness benefit society, to which the state also contributes. The cooperative movement is also well organized.

Approximately ninety percent of the land is productive and about three-quarters is actually farmed. Agrarian reform laws have operated to bring about a large number of small holdings. About two-fifths of the cultivated area is devoted to cereals, led by barley, mixed grain, oats, rye and wheat. Root crops (fodder), potatoes and sugar beets also are important. The principal source of exports and of the nation's wealth is dairy farming and the production of bacon and pork (1947: 210,000 metric tons), milk (4,100,000 tons), butter (125,000 tons), beef and veal (398,000 tons, liveweight), eggs (62,000 tons), and cheese (43,000 tons). Livestock in 1947 numbered 2,987,000 cattle (including 1,538,000 milk cows), 1,791,000 hogs and 19,271,000 poultry. Total value of farm and dairy production in 1947 was 3,242,000,000 kroner. Farming keeps pace with scientific advances.

Denmark produces primarily for home consumption, though some industrial products, such as Diesel motors, are large exports. In 1944 there were 6,717 industrial establishments with 195,097 workers and an output valued at 4,791,711,000 kr. The largest industries were food-processing and iron and metal. Others were chemical and pharmaceutical, wood and paper, clothing, textiles, machinery, beverages and leather.

The per capita rate of Denmark's foreign commerce is exceptionally high. Trade statistics, in millions of kroner, are as follows:

	1938	1946	1947
Exports	1,535	1,618	2,316
Imports	1,625	2,847	3,086

Leading suppliers in 1947 were Great Britain (21.7%), the U. S. (19.6%) and Belgium (8.0%). Chief customers were Great Britain (22.1%), Sweden (7.4%) and Belgium (5.1%).

Leading exports in 1947 were butter and other milk products, 24.4%; bacon, 12.5%; fish, 7.4%; live animals, 7.0%; and machinery (not electrical), 5.7%. Leading imports were coal, coke, petroleum, iron and steel, transport equipment, wood and fodder.

The Danish merchant marine, one of the largest in the world on a per-capita basis, had 2,242 ships totaling 1,098,000 gross tons on Oct. 1, 1947. Regular communications with foreign countries are mainly westward by sea. There are Swedish ferry services from Copenhagen to Malmö and from Helsingör (Elsinore) to Hålsingborg.

The main land route to the rest of the

continent is the railway via Padborg and Schleswig to Hamburg. Railway mileage totals about 3,050, nearly half nationalized. Train-ferry services for inter-island communication are highly organized. Motor transport also is well advanced, with about 35,000 miles of roads.

Ordinary government expenditures for 1948-49 were estimated at 1,744,000,000 kr. and receipts at 1,731,000,000 kr. The public debt on Sept. 30, 1946, totaled 4,442,400,-000 kr.

Mineral resources are negligible, although some coal, granite and kaolin are found on the island of Bornholm. Large quantities of coal and coke must be imported. Peat bogs supply an important source of fuel. Forest resources are unimportant.

The fishing industry, centered at Copenhagen but carried on also in the shallow fjords and in the deeper waters of the Baltic, North Sea and Skagerrak, is a basic part of the Danish economy. The 1947 catch of 200,000 metric tons was valued at 174,000,000 kr. Normally, about two-thirds of the catch is exported, usually fresh, ice-packed, or live.

TOPOGRAPHY AND CLIMATE. Denmark, only three miles from Sweden at the closest point, consists of the Jutland peninsula and the islands in the Baltic. The largest islands are Zealand, the site of Copenhagen; Fünen; and far to the east, Bornholm. The narrow waters to the north are called Skagerrak; and to the east, Kattegat.

The terrain of the whole kingdom is low but not flat. Its highest point is about 500 feet, and there are many lakes, ponds and short rivers. Sand dunes line the western Jutland coast almost without a break.

Denmark's climate is like that of eastern England, but with colder winters and warmer summers. The average annual temperature is 45.2° (61° in July; 32° in January). Average rainfall is 24 inches; thunderstorms are frequent in summer.

Outlying Territories

FAEROE ISLANDS—Status: Autonomous part of Denmark.

Area: 540 square miles.

Population (census 1945): 29,198.

Capital: Thorshavn (population 3,611).

Government: Danish-appointed governor and locally-elected assembly.

Principal products: cod, whale oil, cod liver oil, wool, fertilizers, skins and leather.

This group of 21 islands, lying in the North Atlantic about 200 miles northwest of the Shetland Islands, joined Denmark in 1386 and has since been part of the Danish kingdom. The islands were occupied by British troops during World War I, after the German occupation of Denmark. The principal pursuits are fishing and sheep grazing. The predominant

Sjálvstýrisflokkur, or Home Rule party, heads a movement seeking autonomy. Those favoring independence won a slight majority in a plebiscite held Sept. 14, 1946, but subsequent elections gave pro-Danes a majority. However, a bill enacted Mar. 30, 1948, established home rule.

GREENLAND—Status: Colony.

Area: 839,782 square miles (almost 85 per cent glacier).

Population (1946): natives, 21,379; Europeans, 450.

Government: Two inspectorates (Godthaab and Godhavn) supervised by the director for Greenland in Copenhagen.

Principal products: cryolite (1947: exports to U. S., 19,500 tons; to Denmark, 20,900 tons), fish, hides and skins, whale and fish oil, marble.

Greenland, the world's largest island, was colonized in 985-86 by Eric the Red. Danish sovereignty, which covered only the west coast, was extended over the whole island in 1917. In 1941 the United States signed an agreement with the Danish minister in Washington, placing it under U. S. protection during World War II but maintaining Danish sovereignty. U. S. weather stations were built on the island during the war. Greenland is the only source of natural cryolite, important in the manufacture of aluminum. Trade (except cryolite) is a Crown monopoly.

Dominican Republic (República Dominicana)

Area: 19,327 square miles.

Population (est. 1948): 2,182,109 (mestizo and mulatto, 70%; white, 15%; Negro, 15%).

Density per square mile: 112.8.

President: Rafael Leónidas Trujillo y Molina.

Principal cities (est. 1946): Ciudad Trujillo, 131,271 (capital; sugar); (est. 1945): Santiago de los Caballeros, 54,113 (tobacco); San Pedro de Macorís, 22,728 (sugar port); Puerto Plata, 15,610 (seaport).

Monetary unit: Dominican peso.

Language: Spanish.

Religion: Roman Catholic.

HISTORY AND GOVERNMENT. The Dominican Republic (formerly San Domingo) occupies the eastern two-thirds of the island which Columbus named La Española (now Hispaniola) when he discovered it on his first voyage in 1492. The other third is occupied by the republic of Haiti. The capital, Ciudad Trujillo, founded in 1496, is the oldest white settlement in the Western Hemisphere.

The Dominican Republic was variously under Spanish, French and Haitian domination until it established its independence in 1865 and then plunged into an unstable political history. U. S. Marines occupied it from 1916 to 1924, when a new constitution was adopted. In 1930, Rafael Leónidas Tru-

jillo y Molina, an army general, was elected president. In office most of the time since then, Trujillo has brought about improved irrigation, roads, sanitation and schools, and in May, 1947, he was elected for another term.

The president is elected every five years by popular vote, in which women take part, and he is eligible to be re-elected indefinitely. The 19-member Senate and the 40-member Chamber of Deputies are also elected for five years. Each of the eighteen provinces has an appointed governor. There is a 4,000-man army, a small air force and several coast patrol craft.

SOCIAL AND ECONOMIC CONDITIONS. Education is free and compulsory from 7 to 14. In 1947, there were 2,484 schools, with 229,417 students. The government began construction of a university city in 1946.

Primarily agricultural, the country produces sugar (1946: 505,709 short tons), coffee (1944-45: 56,100,000 lb.), tobacco (1946: 31,060 short tons), cacao, bananas, rice, corn, cassava, beans and sweet potatoes. The raising of hogs and cattle has been expanded recently, and the government is attempting to diversify crops to lessen the republic's dependence on sugar exports. Sugar refining, largely U. S. controlled, is the only important manufacture.

Exports, mostly sugar, were valued in 1947 at U. S. \$83,205,993; imports were valued at \$50,163,926. Cacao, coffee, molasses and tobacco are other chief exports. The main imports, mostly from the U. S., are cotton goods, iron and steel products, chemicals and machinery. A large proportion of the sugar is exported to Britain.

Transit facilities include about 170 miles of public railway, more than 600 miles of sugar plantation railway, and more than 2,000 miles of highway.

The 1948 budget estimated expenditures at \$57,161,600 and revenues at \$58,132,600. The Republic's foreign debt was retired in July, 1947; the remaining public debt was \$8,053,797.

Mineral resources are limited and production is negligible. Exports in 1945 included 20,000 grams of gold, and 3,585 short tons of gypsum. The more readily accessible timberland has been thoroughly exploited, producing mahogany, lignum vitae and pine.

TOPOGRAPHY AND CLIMATE. Crossed from northwest to southeast by a mountain range with maximum elevations exceeding 10,000 feet, the country has fertile, well-watered land on the northeast side, where nearly two-thirds of the population lives. The southwest part is arid and with poor soil except around Ciudad Trujillo. The country has many good harbors.

There is little range in temperature, with mean January average of 74°, and August average of 81°. The elevated interior is

cooler than the coastlands. Rainfall occurs mostly from May to November.

Ecuador (Republic)

(República del Ecuador)

Area: 104,510 square miles.

Population (est. 1946): 3,340,000 (60% pure Indian, 25% mestizo, 15% white).

Density per square mile: 31.9.

President: Galo Plaza Lasso.

Principal cities (est. 1944): Quito,* 211,174 (capital); Guayaquil, 172,948 (chief port); Cuenca, 52,519 (trading center); Riobamba, 27,459 (sugar, cereals).

Monetary unit: Sucre.

Languages: Spanish, Quéchua.

Religion: Roman Catholic.

*1947 census.

HISTORY. Mostly forested and mountainous and a little larger than Colorado, Ecuador has a long history replete with the forceful rule of dictators. The Spanish under Francisco Pizarro conquered the land in 1532 by defeating the Inca Atahualpa. The first revolt against Spain occurred in 1809, but the victory was not complete until the Battle of Pichincha on May 24, 1822. Ecuador then joined Venezuela and Colombia in a confederacy founded by Simón Bolívar and known as Colombia, but withdrew amicably and became independent in 1830. The country's subsequent history has been largely one of dictatorships, notably under Juan José Flores, Gabriel García Moreno and Eloy Alfaro. Since 1900, administrations have fallen, usually by force, on the average of every two years. Shortly before the 1944 elections, President Carlos Arroyo del Río was forcibly replaced by José Velasco Ibarra, recalled from exile in Argentina. Velasco Ibarra, confirmed in office by the voters later in the same year, followed the old pattern by assuming the role of dictator in 1946 and suppressing opposition.

Ibarra was deposed in Aug., 1947, and after three weeks of confusion Carlos Julio Arosemena took over as provisional president until Sept. 1, 1948, when Galo Plaza Lasso, victor in the June 6 elections, took office.

For more than a hundred years, Ecuador disputed its boundary with Peru, frequently resorting to arms. After hostilities started again in 1941, both nations submitted to mediation, and when the decision was made final in 1944, Ecuador lost most of the disputed area.

GOVERNMENT AND DEFENSE. Under the 1946 (16th) constitution, Ecuador elects a president for four years by direct vote, and he is ineligible for further service until at least one term intervenes. The congress is

bicameral, with a Senate and Chamber of Deputies. There are 17 provinces and one territory, the Galápagos Islands (3,029 sq. mi.), 650 miles off the coast.

Military service is compulsory at eighteen. The army numbers 10,000 and 40,000 reserves. A 1,030-ton training ship and several smaller craft make up the navy. There is an aviation school at Guayaquil and a naval school at Salinas. To strengthen defenses of the Panama Canal, the U. S. built a base on Galápagos during World War II; it reverted to Ecuador in 1946.

SOCIAL AND ECONOMIC CONDITIONS. Education is free, compulsory and under state control, but illiteracy is very high—an estimated 62 percent in 1945. School enrollment in 1945 was put at 270,000 in 3,181 primary and 48 secondary schools. Ecuador has universities at Quito, Guayaquil, Cuenca, and Loja.

Although agriculture is the basis of Ecuador's economy, less than 12,000,000 acres are devoted to it. Cacao, the chief crop (1945: 86,000 short tons) is grown in the coastal regions and lower river valleys, along with coffee, bananas, rice, sugar cane, tobacco and cotton. The plateaus and mountain valleys are used for grazing and dairying, and raising cereals and potatoes. Ecuador's main manufactured product is the Panama hat, made of Toquilla straw; 1946 exports were valued at \$4,861,000.

Total imports in 1947 were 604,000,000 sucres; exports were valued at 595,000,000 sucres.

Railway mileage in 1945 was 765, all nationalized. The principal road connects the chief port, Guayaquil, with Quito. Highway mileage was 4,280, of which 2,730 were termed all-weather.

The 1947 budget was estimated at \$25,-630,000. American direct investments in 1940 were \$5,107,000; British investments on Dec. 31, 1947, were £4,433,475. The national debt, Dec. 31, 1946, was \$48,600,000.

Ecuador mined 70,280 troy oz. of gold and 220,878 oz. of silver in 1945. Copper and lead also are mined. In 1946, 2,322,000 barrels of petroleum were produced. The country is the world's chief source of light, strong balsa wood, and exported 2,778 metric tons in 1946, but exports have declined steadily since 1943. In the same year 1,327 tons of rubber were exported. Dye wood, cinchona bark, kapok and vegetable ivory are other products of the vast forest.

TOPOGRAPHY AND CLIMATE. Two high and parallel ranges of the Andes, traversing Ecuador from north to south, are topped by tall volcanic peaks including Chimborazo (20,577 feet) and Cotopaxi (19,344). The region between the mountains and the coast is rich but extremely hot and swampy; beyond the mountains

to the east is the rainy, forested and tropical Amazon plain, largely uninhabited.

Though Ecuador, as its name implies, lies on the equator, its climate ranges from tropical and temperate to the Arctic conditions of its snow-capped peaks. Temperatures on the coast average 83°; on the Andean plateau, about 46° to 70°. The rainy season extends from December through April or May.

Egypt (Kingdom)

(Misr)

Area: approximately 383,000 square miles.

Population (census 1947): 19,088,967 (1944: Egyptian, 95.4%; Arabian, 1.7%; Greek, .6%; others, 2.3%).

Density per square mile: 49.8.

Sovereign: King Farouk I.

Premier: Mahmoud Fahmy el-Nokrashy Pasha.

Principal cities (census 1947): Cairo, 2,100,-506 (capital); Alexandria, 928,237 (chief port); Port Said, 178,432 (Suez Canal terminus); Tanta, 139,816 (railroad center, Nile delta); Mansûra, 102,519 (cotton).

Monetary unit: Egyptian pound (£E).

Language: Arabic.

Religions: Mohammedan, 91%; Christian (mostly Copt and Greek Orthodox), 7%; others, 2%.

HISTORY. Egypt, half again the size of Texas, and the largest and most influential of the Arab states, has been an object of big-power controversy for centuries. In modern times its ambitions for complete and unfettered independence have been frustrated by the British, who were forced to use Egyptian bases to protect their Suez Canal lifeline. British troops were evacuated from Cairo and Alexandria in 1946, but Anglo-Egyptian negotiations for revision of the 1936 treaty broke down late in 1946 after British refusal to recognize Egyptian sovereignty over the Anglo-Egyptian Sudan. Egypt brought the problem before the U. N. Security Council on Aug. 5, 1947, but the Council advised resumption of direct negotiations. The impasse continued in 1948.

In May, 1948, Egyptian forces spearheaded the Arab drive into southern Palestine.

Egyptian history dates back to about 4000 B.C., when the kingdoms of upper and lower Egypt, already highly civilized, were united. Egypt's "Golden Age" coincided with the 18th and 19th dynasties (16th to 13th centuries B.C.), during which the empire was established. Persia conquered Egypt in 525 B.C.; Alexander the Great subdued it in 332 B.C., and then the dynasty of the Ptolemies ruled the land until 30 B.C., when Cleopatra, last of the line, committed suicide and Egypt became a Roman province. From 641 to 1517 the Arab caliphs ruled Egypt, and then the Turks took it and made it part of their Ottoman Empire. Napoleon's armies occupied the coun-

try from 1798 to 1801. In 1805, Mohammed Ali, leader of a band of Albanian soldiers, became Pasha of Egypt, founding the present line of rulers. After completion of the Suez Canal in 1869, the French and British took increasing interest in Egypt.

British troops occupied Egypt in 1882, and British resident agents became its actual administrators, though it remained under nominal Turkish sovereignty. On Dec. 18, 1914, this fiction was ended and Egypt became a British protectorate.

Pressure by Egyptian nationalists forced Britain to declare Egypt an independent, sovereign state on Feb. 28, 1922, although the British reserved rights for the protection of the Suez Canal and the defense of Egypt. On Aug. 26, 1936, by an Anglo-Egyptian treaty of alliance, all British troops and officials were to be withdrawn, except from the Suez Canal zone. When World War II started, Egypt remained neutral. But it early became a strategic base for allied forces, both because of its key location for countering German offenses in North Africa and because of the vital importance of the Suez Canal. British imperial troops finally ended the Nazi threat to Suez in 1942 in the decisive battle of El Alamein, west of Alexandria.

In March, 1942, the Wafd (Nationalist) party won the elections and controlled the government until its cabinet was dismissed by the king in October, 1944. Ahmed Maher Pasha, leader of the Saadist party (an offshoot of the Wafdists), formed a coalition cabinet of all parties except the Wafd. He was assassinated on Feb. 24, 1945, while reading a declaration of war against the Axis. Mahmoud Fahmy el-Nokrashy Pasha, the Saadist foreign minister, succeeded him. He gave way to Ismail Sidky Pasha on Feb. 15, 1946, but returned to power on Dec. 10, 1946 with a Saadist-Liberal cabinet which has since remained in office.

RULER. King Farouk I, who was born Feb. 11, 1920, succeeded his father, Fuad I, on April 28, 1936. He was married on Jan. 20, 1938, to Farida Zulfikar, granddaughter of a former prime minister. Their children are Princess Ferial, born in 1938; Princess Fawzieh, 1940, and Princess Fadia, 1943. Since succession is limited to the male line, the heir presumptive is Prince Mohammed Ali, born in 1875, a first cousin to the king.

GOVERNMENT AND DEFENSE. Egypt is a constitutional hereditary monarchy. The bicameral Parliament has a Senate of 147 members, two-fifths of whom are appointed by the king and the rest popularly elected for 10 years (half renewable every five years); and a Chamber of Deputies of 264 members popularly elected by universal male suffrage for five years unless sooner dissolved by the king. The king acts

through a cabinet appointed by him but responsible to Parliament.

Elections for the Chamber of Deputies held Jan. 10, 1945 (boycotted by the Wafd party) gave the Saadists 125 seats, Liberals 74, Wafdist Bloc (dissident Wafdist group) 29, National Party 7 and Independents 29.

Under the Anglo-Egyptian Treaty of 1936 the peacetime strength of British troops in the Suez Canal zone is set at 10,000, with 400 air force personnel, but no limit is set in time of war or international emergency. Military service for Egyptians is compulsory. The Egyptian army, strengthened and modernized during World War II, has about 160,000 men, including police units under military control. The air force has about 150 combat planes, and the navy has several small vessels.

SOCIAL AND ECONOMIC CONDITIONS. Education is compulsory between the ages of 7 and 12. In 1943 there were 7,415 elementary and secondary schools with attendance of 1,358,453. The University Mosque of el-Azhar in Cairo (founded A.D. 972) is the chief theological seminary of the Moslem world. The University of Fuad I in Cairo (founded 1908) had 8,898 students in 1945 while the University of Farouk I in Alexandria (founded 1943) had 2,826 students.

The majority of the people are Sunni Moslems. The Christians are mainly Copts with an admixture of Armenian, Syrian and Maronite sects. The population divides generally into fellahin (peasantry) and townspeople of the same blood, the Bedouin or nomad Arabs of the desert, and the Berbers, who occupy the Nile valley between Aswan and Dongola. The foreigners are chiefly Greeks (whose main center is Alexandria), French, British and Italians.

Egypt has one of the highest birth rates in the world (38.1 per 1,000 population in 1942) and one of the highest death rates. The density of the population in the small inhabited area in the Nile valley and delta is far greater than that of Belgium or Bengal.

Agriculture is the chief industry, engaging more than half the population. Only about 3.5 percent (8,620,850 acres) of the total area is arable, and only about 6,040,000 acres are actually under cultivation, almost entirely in the Nile valley and delta. More than half the cultivated area comprises farms of less than 20 acres. Irrigation is indispensable to agriculture; the Aswan reservoir above the first cataract of the Nile holds up to 5,500,000,000 cubic meters of water and that of Gebel Aulia, in the Anglo-Egyptian Sudan, 2,000,000,000 cubic meters. In the delta and in middle Egypt, where perennial or canal irrigation is possible, two or three crops a year can be grown. The chief cash crop is cotton, of which Egypt is a leading producer.

MAJOR AGRICULTURAL CROPS, 1947

Crop	Acreage	Production bu.
Wheat	1,692,000	39,000,000
Maize	1,672,000	56,000,000
Rice	806,000	24,000,000
Barley	246,000	81,000,000
	1946	short tons
Sugar cane	93,400	2,800,000
Cotton (ginned)	1,304,000	300,000

Other crops include fruit, vegetables, dates and grapes. The pastoral industry is relatively unimportant except to the Bedouins in the eastern desert. In 1947 there were 1,317,639 cattle, 1,238,756 buffalo (used to turn water wheels for irrigation), 1,868,261 sheep, 1,473,840 goats, 196,084 camels and 1,124,961 donkeys.

Industry includes sugar refining, cotton ginning, cement manufacture, milling and pottery, soap and perfume making. The French-controlled Sugar Company of Egypt holds a monopoly on sugar refining. Sugar production in 1947 was 190,779 metric tons.

Foreign trade statistics:

	(in millions of Egyptian pounds)		
	1938	1946	1947
Exports	29.4	69.0	90.4
Imports	36.8	80.0	99.6

In 1947, Egypt's chief customers (in thousands of Egyptian pounds) were India, 14,625; Britain, 12,710; Italy, 11,991; and France, 10,712. Leading suppliers were Britain, 23,040; the U. S., 11,659; Italy, 9,187; and France, 6,626. Raw cotton was the most important export (68,335), followed by rice (6,100) and onions (1,470). Imports included fertilizer, timber, tobacco, tea and petroleum.

Navigable throughout its course in Egypt, the Nile is used largely as a means of cheap transport for heavy goods. The principal port is Alexandria. Railway mileage in 1945 totaled 4,950. Branch lines link Cairo and Alexandria with Suez and nearly every town in the delta. Highway mileage is 8,203. Cairo is a major airport.

The 1948-49 state budget estimated expenditures at £E183,435,100 and revenue at £E141,510,600. The public debt in Jan., 1948, was £E125,001,850.

The most important minerals are manganese ore and oil (1946: 9,335,000 barrels). Phosphate rock, gold, iron ochres, nickel, sodium carbonate, sulfate talc and tungsten also are mined.

Egypt has no forests. The total value of fishery products in 1944 was £E1,772,000, representing a catch of 22,800 short tons. The chief fishing ground is Lake Menzala in the delta, but fish are also caught along the coast of the delta and in the Nile.

TOPOGRAPHY AND CLIMATE. Egypt, at the northeast corner of Africa, is a very rough square, with the historic Nile flowing northward through its eastern third.

On either side of the Nile valley are desert plateaus, spotted with oases. In the north, toward the Mediterranean, plateaus are low, while south of Cairo they rise to a maximum of 1,015 feet above sea level. At the head of the Red Sea, at the northeast corner of Egypt, is the triangular Sinai peninsula, between the Suez Canal and Palestine.

The Nile delta starts 100 miles south of the Mediterranean and fans out to a sea front of 155 miles between Alexandria and Port Said. From Cairo north, the Nile branches into many streams, the principal of which are the Damietta and the Rosetta, joined by a network of canals.

Except for a narrow belt on the Mediterranean, Egypt lies in an almost rainless area, in which high daytime temperatures fall quickly at night. The mean temperature at Cairo varies between 53° in January and 84° in July; at Alexandria, between 57° in January and 81° in July. South of Cairo, pure desert conditions prevail; at Aswan the mean maximum temperature is 118°.

SUEZ CANAL. The Suez Canal, in Egyptian territory between the Arabian Desert and the Sinai peninsula, is an artificial waterway about 100 miles long between Port Said on the Mediterranean and Suez on the Red Sea. Construction work, directed by the French engineer Ferdinand de Lesseps, was begun April 25, 1859, and the canal was opened Nov. 17, 1869. The cost was 432,807,882 francs. The concession is held by a French company, *Compagnie Universelle du Canal Maritime de Suez*, in which the British government holds 295,026 out of a total of 652,932 shares. The concession expires Nov. 17, 1968, when it will revert to the Egyptian government. On the board of management in 1948 were one Dutch, one American, 2 Egyptian, 16 French and 9 British directors.

SUEZ CANAL STATISTICS

Year	Ships	Tonnage	Receipts
1938	6,127	34,249,745	1,784,278,091 fr.
1945	4,206	25,064,966	£ 9,911,500
1946	5,057	32,731,631	£12,246,300
1947	5,972	36,576,581	£13,147,200

In 1947, 46.9% of the tonnage was British, 19.9% U. S. and 7.2% Norwegian.

ANGLO-EGYPTIAN SUDAN—Status: Anglo-Egyptian condominium.

Area: 967,500 square miles.

Population (1947): 7,547,500.

Capital: Khartoum (pop. 1947: 61,800).

Governor general: Sir Robert Howe.

Foreign trade (1947): exports, £E14,865,848; imports, £E16,773,633. Chief export: raw cotton (57%).

Agricultural products: cottonseed, ginned cotton, millet, sesame, wheat, groundnuts.

Minerals: gold, salt.

Forest product: gum arabic (exports 1946: 34,082 short tons).

About one-fourth the size of Europe, Anglo-Egyptian Sudan extends from north to south about 1,200 miles and west to east about 1,000 miles. Before the revolt against Egyptian rule by the Arabized tribes under Mohammed Ahmed (the Mahdi) in 1882-84, the region was known as Egyptian Sudan. Since its reconquest by the Anglo-Egyptian expeditions of 1896-98, it has been known by its present name. A governor general, appointed by the king of Egypt on British recommendation, is assisted by a council of 6 to 8 members.

During the 1946 treaty negotiations, Egypt demanded union of the area with the Egyptian crown, but important Sudanese groups favored complete independence. The aim of the British administration in Sudan was described as the establishment of self-government as a first step toward eventual independence. On June 14, 1948, Britain authorized the governor general to proceed with plans for a greater measure of self-government.

The northern region is a continuation of the Libyan Desert. The southern region is fertile, abundantly watered and, in places, heavily forested. It is traversed from north to south by the Nile, all of whose great tributaries are partly or entirely within its borders. The highest elevation is a mountain range parallel to the Red Sea, with heights of 4,000 to over 7,000 feet. Sudan is the chief source of gum arabic; the southern forests also are rich in fibers and tannins.

There are two trunk railways, one connecting Sudan with Egypt and the other affording access to the chief port, Port Sudan, on the Red Sea.

The whole country lies within the tropics and has an exceedingly hot climate—greatest in the central area and least in the desert zone, where the temperature range is large. At Khartoum the mean annual temperature is 80°, with January the coldest and June the hottest month.

Eire (Republic)

Area: 26,601 square miles (not including larger water bodies).

Population (est. 1947): 2,980,000 (almost entirely Irish).

Density per square mile: 112.0

President: Séan T. O'Kelly.

Prime Minister: John A. Costello.

Principal cities (census 1946): Dublin (Baile Átha Cliath) 506,635 (capital); Cork, 75,361 (seaport); Kingstown (Dun Laoghaire), 44,689 (seaport); Limerick (Luimneach), 42,987 (seaport).

Monetary unit: Irish pound.

Languages: Gaelic, English.

Religions (1936): Roman Catholic, 93.4%; Protestant Episcopal, 4.8%; Presbyterian, 1%; others, .8%.

HISTORY. Eire—formerly the Irish Free State—is an agrarian state that occupies five-sixths of the island of Ireland west of England, across the Irish Sea. Its fiercely independent people are still subject to some of the tensions tracing back to their revolt against British rule in 1919-21.

About the beginning of the Christian era, Ireland was divided into five kingdoms—Ulster, North Leinster, South Leinster, Munster and Connaught—each with its own ruler, but each subject to the overlord of all Ireland who dwelt at Tara. St. Patrick introduced Christianity in A.D. 432 and became the country's patron saint.

Norse depredations along the coasts, starting in 795, ended in 1014 with Norse defeat at the Battle of Clontarf by forces under Brian. In the middle of the 12th century, the Pope gave all Ireland to the English crown as a papal fief. In 1171 Henry II of England was acknowledged "Lord of Ireland," but native sectional rule continued for centuries, and English control over the whole island was not reasonably absolute until the 17th century. By the Act of Union (1800), England and Ireland became the "United Kingdom of Great Britain and Ireland."

The great potato famine of 1846-48 took many lives and drove millions to emigrate to America.

Several home-rule bills were introduced in the English Parliament in the 19th century, but failed of passage. One was finally approved in 1914, but enforcement was suspended by the outbreak of World War I. During the war, agitation for freedom was carried on by the nationalist party—Sinn Féin (Ourselves). In 1916 the British quickly suppressed the famous Easter Week rebellion and executed its leaders.

After the 1918 elections, seventy-three of the Sinn Féiners elected to the English Parliament met in Dublin, proclaimed themselves an Irish Parliament, and passed a declaration of independence. The result was war between Irish nationalists and British troops from January, 1919, to May, 1921. A treaty ratified in December, 1921, gave Ireland political status equal to that of Canada. Six Ulster counties, largely Protestant, formed a separate government as Northern Ireland, closely bound to England; the other twenty-six became the Irish Free State. Republican extremists, headed by Éamon de Valera, refused for several years to recognize the treaty.

William Cosgrave, leader of the Sinn Féin's right wing, was president from 1922 to 1932. In the latter year, De Valera's party, Fianna Fáil, won control of the government. Under De Valera's leadership a new constitution was adopted in 1937 making the nation, in effect a republic. The country's former name of "Eire" was restored by the constitution.

Dr. Douglas Hyde, elected without opposition as Eire's first president in 1938, was succeeded in 1945 by Séan T. O'Kelly, the Fianna Fáil nominee. The country maintained strict neutrality during World War II.

De Valera's long tenure as prime minister came to an end in Feb., 1948, when the Fianna Fáil lost its absolute majority in the parliamentary elections. John A. Costello, a Fine Gael moderate, took office at the head of a six-party coalition cabinet on Feb. 18, 1948.

GOVERNMENT AND DEFENSE. Eire is a sovereign, independent, democratic state. The oath of allegiance to England's king was abolished in 1933, and in 1945 De Valera described Eire as a republic linked with the British Commonwealth only by the External Relations Act of 1936. The president, directly elected for seven years, names the prime minister on the nomination of the chamber of deputies. Parliament (Oireachtas) has two houses. The chamber of deputies (Dáil Eireann) has 147 members elected by proportional representation for a five-year term. The senate (Seanad Eireann) has 60 members, of whom 11 are named by the prime minister, 6 by the universities, and 43 from vocational panels; its powers are limited.

Party representation in the Dáil Eireann after the elections of Feb. 4, 1948, was as follows: Fianna Fáil, 68; Fine Gael, 31; Labour, 14; Clann na Poblachta, 10; others, 24.

Military service is voluntary. The army had 11,397 men in 1947, and the air force 62 combat planes. In 1938 Britain gave up its last defense posts in Eire, including those at Cobh, Berehaven and Lough Swilly.

SOCIAL AND ECONOMIC CONDITIONS. Elementary education is free and is provided in state schools; secondary education is under private control, notably the religious orders. Technical and agricultural education is under local control, aided by state subsidies. The 4,957 elementary schools in 1946-47 had 451,820 students; 393 secondary schools had 42,927 students. The University of Dublin (Trinity College), founded in 1591, had an enrollment of 1,484 in 1946-47, and the National University of Ireland (constituent colleges at Cork, Galway and Dublin) had 4,857.

The majority of the people are English-speaking, although the government has attempted to promote the traditional Gaelic language, which is an essential part of the curriculum for all state schools.

Eire is predominantly an agricultural country, with about 70 percent of the total land area (17,000,000 acres) devoted to crops and pasture. The pastoral industry is the basis of the nation's economy, but recent years have brought a greater di-

versity in agriculture, marked by large increases in sugar beet and wheat production. Principal crops in 1947 were wheat, 6,260,177 cwt.; rye, 95,879 cwt.; oats, 13,056,520 cwt.; potatoes, 52,004,280 cwt.; sugar beets, 9,599,000 cwt., and flax, 49,467 cwt. Other staple crops are turnips, cabbage and hay. Livestock in 1947 included 3,950,152 cattle, 2,094,057 sheep and 456,973 hogs. Wool output in 1947 was 118,321 cwt., and butter output 519,116 cwt.

The government's self-sufficiency policy, plus financial and tariff inducements, have promoted considerable industrial development since 1928. The leading manufactures, in order of value, are ordinarily beverages, tobacco, wood, paper, clothing, textiles and metals. The hydroelectric plant erected on the Shannon River in County Limerick provides cheap electricity for homes and factories.

Trade statistics are as follows (in millions of Irish pounds):

	1938	1946	1947
Exports (including re-exports)	24.4	39.1	39.7
Imports, c.i.f.	41.5	72.2	130.8

The leading customer in 1947 was Great Britain (69%), followed by Northern Ireland (18%) and Belgium (4.6%). Great Britain was also the chief supplier (39%), followed by the U. S. (22%) and Canada (4.3%). The major export is cattle; others are bacon, beer, butter, horses, eggs and textiles. The major imports are textiles, coal, wheat, iron, steel, corn, tea, petroleum, clothing and tobacco.

The merchant marine in 1944 had 466 vessels with a net tonnage of 44,650. Almost all transport facilities are nationalized. Railway mileage is about 2,500. Main roads in 1945 totaled 9,798 miles, and secondary roads 39,191 miles. Shannon is rapidly developing into a key international airport. There are 670 miles of canals and navigable waterways.

Government expenditures for 1948-49 were estimated at £70,483,000, and revenue at £70,508,000. The public debt on March 31, 1948, was £95,732,161; assets were £48,478,939.

In 1944 Eire mined 226,600 short tons of coal, some gypsum, and considerable peat from its bogs, but otherwise the mineral resources are negligible, as are those of the forests. In 1946, 1,200,000 tons of coal were imported from Britain. The fishing industry employs about 10,000 men. The 1946 catch, including mackerel, herring, whiting, cod, plaice and shellfish, was valued at £594,336.

TOPOGRAPHY AND CLIMATE. Occupying the entire island except for the six northern counties of Ulster, Eire resembles a basin—a central plain rimmed with mountains, except in the Dublin region. The

mountains are low, with the highest peak, Carrantuohill in Kerry County, rising 3,415 feet. Eire's principal river is the Shannon, which begins in the north central area, flows south and southwest for about 240 miles and empties into the Atlantic. About 20 percent of the country is covered by bogs. Among Eire's many lakes are the famous Lakes of Killarney in the southwest county of Kerry.

Eire's moist and mild climate, with annual rainfall running between thirty and forty inches fairly evenly distributed throughout the year, is influenced by the Gulf Stream, which makes the winters warmer than in other places in the same latitude. The mean temperature at Dublin is 41.7° in January and 60.5° in July.

Ethiopia (Kingdom)

(Abyssinia)

Area: 350,000 square miles.

Population (est. 1939): 9,500,000 (Abyssinian [Amharal], 20%; Galla, 50%; others, 30%).

Density per square mile: 27.1.

Ruler: Emperor Haile Selassie I.

Prime Minister: Bitwoded Makonnen Endalkatchau.

Principal cities (est. 1946): Addis Ababa, 300,000 (capital); (est. 1939): Dire Dawa, 30,000; Harar, 25,000.

Monetary unit: Ethiopian paper dollar.

Languages: Amharic, Arabic.

Religions: Copt (Christian), Mohammedan.

HISTORY. Ethiopia, a land-locked African kingdom more than twice the size of California, was one of the first victims of the Axis aggression that culminated in World War II. Italy, after creating fake border incidents, invaded the country on Oct. 3, 1935, and Addis Ababa fell on May 5, 1936. Haile Selassie, the emperor, fled the country, and the Italians welded Ethiopia, Italian Somaliland and Eritrea into the colony of Italian East Africa.

World War II brought early liberation; Ethiopia, in fact, was the first of the Axis-occupied nations to be retaken by the Allies. British and Ethiopian troops reconquered the country in 1941, with the final Italian surrender occurring on Nov. 27. During a transition period thereafter, the nation was under dual Anglo-Ethiopian control. Under an agreement signed on Jan. 31, 1942, British troops quit the country except for stipulated border areas. The latter were still under British control in 1948.

After the war, the country launched a modernization program in agriculture, industry and education. Irredentist claims to the ex-Italian colonies and former Ethiopian provinces, Eritrea and Somaliland, began to be voiced in 1946.

The Ethiopian royal family claims descent from the Queen of Sheba and from Menelek, a son of King Solomon. Christianity was introduced about A.D. 330, and after the Arab conquest of northern Africa in the 7th century, Ethiopia was more or less cut off from the outside world for a thousand years. When Theodore III proclaimed himself emperor in 1853, the country was a conglomeration of autonomous provinces under hereditary chiefs who were usually at war with one another. Menelek II, who ascended the throne in 1889, brought Ethiopia under single rule, and his forces finished off a five-year Italian attempt at invasion with a great massacre at Aduwa on March 1, 1896. Revenge for this massacre was one of Mussolini's great war cries in the 1935-36 invasion.

GOVERNMENT. Ethiopia's ruler, Haile Selassie I, was born on July 17, 1891, crowned king on Oct. 7, 1928, and emperor on Nov. 2, 1930. His eldest son, the crown prince and heir apparent, is Asfa Wassan, born on July 27, 1916. The emperor directly controls the government, though there now is a Council of Ministers, a Senate and a Chamber of Deputies. All members are appointed by the monarch, however. The country is divided into 12 provinces.

In wartime, military service is compulsory. The small Ethiopian standing army is equipped and trained by a British military mission.

SOCIAL AND ECONOMIC CONDITIONS. The education system is extremely backward. Foreign missions or the government maintain schools in the principal towns, and several secondary schools recently have been set up. The Coptic Church (Christian), with its numerous priests, exercises powerful influence and owns much Ethiopian land. It became independent of the Coptic Archbishop of Alexandria in 1946. Moslems, numerous in frontier regions, have their religious center at Harar. The towns of Ethiopia are scattered and crudely built.

Ethiopia is generally fertile, predominantly agricultural and pastoral, with many regions yielding two crops a year. The chief crops are maize, wheat, barley, rye, cotton, sugar cane, millet, hemp, vegetables, coffee and teff (the common bread grain). The country's inadequate transport system, however, makes crop growing largely a local industry.

The country grazes several million cattle, and many goats and sheep. Horses and mules are bred extensively as pack animals and mounts. There is little manufacturing except for small native industry, although the Italians built some industrial plants during their five-year occupation.

Ethiopia is primarily an importer of consumer's goods and an exporter of raw or semiprocessed materials. For the trade

year ended Sept. 10, 1947, exports, excluding specie, were valued at Eth. \$69,054,000 (1946: Eth. \$49,699,000), of which cereals accounted for 24.9 percent, coffee 23.7 percent, skins 14.8 percent and hides 12.2 percent. Imports were valued at Eth. \$68,997,000 (1946: Eth. \$53,661,000), of which cotton goods comprised 40 percent. Specie exports totaled Eth. \$20,376,000.

The 486-mile track from Addis Ababa to Djibouti in French Somaliland is Ethiopia's only rail outlet and its principal trade route. Motorable roads, non-existent until about 1925, now include about 1,000 miles built by the government, and 4,340 miles built during the Italian occupation. The long rainy season makes road maintenance difficult, and air traffic has become increasingly important, especially as a means of communication with foreign commercial centers. The National Ethiopian Line serves internal and neighboring areas.

Ethiopia is seeking the help of foreign architects in the modernization of Addis Ababa, which, since the days of Menelek, has been a sprawling town of mud huts and tin roofs.

Government expenditures in 1944-45 were Eth. \$40,983,330, while all revenues totaled \$39,338,030, plus a British subsidy of Eth. \$1,915,760.

Gold, produced from placer mines worked by natives in the south and west, is Ethiopia's main mineral. Platinum also is mined in fair commercial quantities. Other minerals are rock salt, cinnabar, copper, iron, mercury, mica, potash and sulfur. Oil deposits are believed to exist, and all drilling rights have been sold to the Sinclair Refining Company of the United States.

Vegetation is dense in the valleys and lowlands, but the plateau is comparatively bare, especially in the north. The forests contain many valuable trees, including the Natal yellow pine.

TOPOGRAPHY AND CLIMATE. Over its main plateau-land, Ethiopia has several high mountains; Dashan, the tallest peak, towers to 14,958 feet northeast of Lake Tana. Most of the many rivers are rapid, not navigable, and flow into the Nile. The Blue Nile, or Abbai, rises in the northwest and flows in a great semicircle east, south and northwest before entering Sudan. Its chief reservoir, Lake Tana, lies in the northwestern part of the plateau.

Ethiopia, lying wholly within the tropics, escapes a torrid climate because of its elevation, although the lowlands are hot. The mean annual range of temperature is between 60° and 80°, although Alpine conditions prevail in the higher mountains. The dry season lasts generally from October to June, the wet season from June to September.

Finland (Republic)

(Suomen Tasavalta)

Area: 130,160 square miles.

Population (est. 1947): 4,100,000 (Finnish 91%; Swedish, 9%).

Density per square mile: 31.5

President: Juho K. Paasikivi.

Prime Minister: Karl August Lagerholm.

Principal cities (est. 1945): Helsinki, 331,191 (capital); (est. 1939): Tampere, 76,730 (textiles, paper); Turku (Åbo), 74,351 (seaport, shipbuilding); Vaasa, 32,695 (seaport).

Monetary unit: Markka (FM).

Languages: Finnish, Swedish.

Religions (1937): Evangelical Lutheran, 97%; Greek Orthodox, 1.7%; Roman Catholic, .02%; others, 1.28%.

HISTORY. The Finns, a people of possibly Mongolian origin, first settled their Montana-sized area about A.D. 100. King Eric IX of Sweden conquered them about 1155 and introduced Christianity. Under Swedish rule, which lasted for 650 years, the Finns retained considerable autonomy and were given their own parliament in the 17th century.

Political pressure growing out of the Napoleonic Wars forced Sweden in 1809 to cede Finland to Russia, which gave the Finns a constitution and set them up as a grand duchy. Out of the chaos and complexities of World War I, the Russian revolution of 1917 and a Finnish civil war in 1918 between "Reds" and "Whites" led by Baron Carl G. Mannerheim, Finland emerged as a republic in 1919. A year later Russia ceded to Finland the Petsamo area with its ice-free Arctic port.

For the next twenty years Finland was generally orderly and prosperous except for vigorous suppression of Communists and a bloodless rightist uprising in 1932. The national presidents during this period were K. J. Ståhlberg, 1919-25; Lauri Relander, 1925-31; P. E. Svinhufvud, 1931-37; and K. Kallio, 1937-40.

In Nov., 1939, the Russians attacked Finland to enforce territorial demands. The sturdy Finns stood off large-scale Red Army assaults for 105 days, but finally lost and ceded to Russia 10 percent of the nation's area, including the Karelian isthmus. Under German pressure and somewhat in a spirit of revenge, the Finns joined the Nazis against Russia in 1941—and lost again.

Risto Ryti, a pro-German who succeeded Kallio as president in 1940, was forced to resign on Aug. 1, 1944, and was replaced by Baron Carl G. von Mannerheim (who had led Finnish forces in both wars with the U.S.S.R.) Finland severed relations with Germany on Sept. 2, signed an armistice and concluded a provisional peace treaty with Britain and Russia, Sept. 19. The U. S. had not declared war on Finland.

Pro-Russian Juho K. Paasikivi became premier on Nov. 11, 1944, and when Mannerheim resigned because of illness on March 4, 1946, Paasikivi was elected by the Diet to fill the unexpired presidential term. The premiership went to Mauno Pekkala, leader of the new Socialist Unity Party, made up of dissident and left-wing groups advocating cooperation with Communists in a popular democratic bloc.

Since then the Finns, burdened by the heavy reparations load, have made good progress in rehabilitating their war-torn areas and industrial plants. Politically they have steered a cautious but realistic course acceptable to the Soviet Union, in whose orbit the country now must turn. Political liberty has been preserved to a surprising extent despite widely differing factions ranging from extreme left to far right.

The Communists and their allies lost ground in the July, 1948, parliamentary election and on July 29, Karl August Lagerholm formed a Social Democrat government in which the leftist bloc was not represented.

GOVERNMENT. Under the 1919 constitution, the 200 Diet members are popularly elected by a proportional representation system for three-year terms. The president, normally chosen for six years by an electoral college of 300 members nominated by the people, acts through his Cabinet headed by the prime minister. Suffrage is universal. Because of the many political parties, government usually is carried on by a coalition, with frequent cabinet changes.

Party standing in the Diet after the July 1, 1948, elections was as follows (1945 standing in parentheses): Social Democrats, 54 (50); Agrarian, 56 (49); Democratic Union (Communists and Socialist Unity), 38 (49); Conservative, 28 (33); Swedish People's, 14 (14); others 5 (10).

PEACE TREATY OF 1947. The final peace treaty became effective Sept. 15, 1947; it confirmed the de facto cession to the U.S.S.R. of the Petsamo area, Viipuri and the Karelian region and also of the Porkkala-Udd area west of Helsinki for use as a Soviet naval base. Finland was to pay reparations of \$300,000,000 in kind (reduced to \$225,000,000 by the U.S.S.R. in 1948) over a period of eight years from Sept. 19, 1944, and was to make two-thirds compensation to United Nations nationals for wartime property loss.

The treaty limited Finnish defense forces to the following strengths: army, 34,400 personnel; navy, 4,500 personnel and a tonnage of 10,000; and air force, 3,000 personnel and 60 aircraft. The possession of bombers, submarines, atomic weapons and motor torpedo boats is prohibited.

SOCIAL AND ECONOMIC CONDITIONS. Illiteracy is very low (.9% beyond the age

of 15). Education is compulsory from 7 to 15. In 1944 there were some 10,700 elementary schools with 326,000 students. In 1945 there were 78 middle schools with 20,700 students, and 163 lyceums with 57,500 students. There were three regular universities, of which Helsinki has the largest enrollment (8,348 in 1945).

About 60 percent of the total population is engaged in agriculture, 17 percent in mining and industry, 3.8 percent in transport, 4.3 percent in commerce, 2 percent in professions and 11 percent in miscellaneous occupations. Considerable progress has been made in social legislation, including workmen's compensation. The cooperative movement is extensive. By a 1927 law, expropriation of large estates was carried out, with compensation to their owners.

Only about 3 percent of the land is under cultivation, and about 5 percent in grassland. The chief crops (with 1946 production in quintals) are oats 3,230,000, rye 1,440,000, barley 1,510,000 and potatoes 9,350,000. Grazing lands are extensive. Livestock in 1946 included 1,673,000 cattle, 1,099,000 sheep and 254,000 hogs.

In 1945 there were 5,205 larger manufacturing establishments in Finland, with 219,506 workers and an output valued at \$680,670,000. The leading manufactures are wood and paper (about one third the total value), food, luxury items, machinery and textiles. Following the cession of the Karelian isthmus and the city of Viipuri to the U. S. S. R., Finland lost valuable manufacturing areas. Helsinki is the principal industrial center.

Trade statistics, in billions of markkas, are as follows:

	1938	1946	1947
Exports	8.40	31.83	55.63
Reparations		8.77*	10.41*
Imports	8.49	24.27	46.89

*Included in export totals.

Leading free exports in 1947 were paper and pulp products, 48.0 percent, and wood and wood products, 43.0 percent. Principal suppliers by percentage were the U. S., 22.8; Britain, 14.1; the U. S. S. R., 8.3, and Belgium, 7.8. Chief customers were Britain, 29.1; the U. S. S. R., 12.3; the U. S., 11.4, and Denmark, 7.0.

The merchant marine on Dec. 31, 1947, totaled 644 vessels of 489,966 gross tons. The numerous lakes, many of them joined by canals, are busy transport routes. About 40,000 vessels and 18,000 timber rafts use the canals annually. There were approximately 20,000 miles of highway in 1944 and 17,000 miles of secondary roads. Railway mileage in 1947 totaled 3,063, almost entirely nationalized.

Revenue in 1947 was estimated: 62,558,000,000 FM (1946: 55,529,000,000 FM) and expenditures at 62,532,000,000 FM (1946:

55,526,000,000 FM). The consolidated debt, Oct. 31, 1946, was 104,343,000,000 FM compared to 4,074,200,000 FM in Sept., 1939.

Finland has no coal or oil, and many of its ore deposits are remote from transportation. Finland's sulfide ore, with yearly production of about 300,000 tons, is 4 percent copper, 26 percent sulfur and 27 percent iron, with some zinc, cobalt, gold and silver. Limestone, soapstone and red granite deposits are extensive. Wood and peat are the only natural fuels.

More than a third of Finland is covered with high quality timber, the nation's richest natural resource. The value of lumber, pulp and paper exports in 1946 was 10,700,000,000 FM. Sawed timber production in 1947 totaled 735,000 standards, cellulose 954,000 metric tons, paper 518,000 metric tons, and boards and cardboards 135,000 metric tons.

Finns have fished for centuries, not commercially, but for domestic consumption. The 1947 catch was 45,000 tons and was valued at \$23,000,000.

TOPOGRAPHY AND CLIMATE. Finland stretches 700 miles from the Gulf of Finland on the south to Soviet Petsamo, north of the Arctic Circle. Off the southwest coast are the Åland Islands (approximately 300), controlling the entrance to the Gulf of Bothnia. Finland has more than 60,000 lakes. Of the 1939 area, 11 percent was lake and 48 percent swampland. Of the few rivers, only the Oulu (Uleå) is navigable to any important extent. Most of the country is tableland 400 to 600 feet above sea level, with a rise to 4,115 feet in the Hailuittjokko region of the northwest.

Finland's long severe winters are moderated somewhat along the coast by prevailing southwest winds, but the summer lasts only about two and a half months. Southerly Finnish ports are icebound part of the year. Rainfall is light, with the driest months from May to September.

France (Republic) (République Française)

Area: 212,741 square miles.

Population (census 1946): 40,517,923 (French 94.2%; others, 5.8%).

Density per square mile: 190.4.

President: Vincent Auriol.

Premier: Henri Queuille.

Principal cities (census 1946): Paris, 2,725,374 (capital); Marseille, 636,264 (chief port); Lyon, 460,748 (silk, metal manufacture); Toulouse, 264,411 (tobacco; commercial center); Bordeaux, 253,751 (seaport; wine); Nice, 211,165 (resort center); Nantes, 200,265 (manufacturing).

Monetary unit: Franc.

Religion (est.): Roman Catholic, 97.5%; Protestant and others, 2.5%.

HISTORY. One of the world's great centers of culture, art and learning, France was bled and devastated in World Wars I and II and emerged in mid-1944 after more than four years of Nazi occupation as a shattered nation.

France was ancient Gaul when Julius Caesar conquered a part of it in 57-52 B.C.; for several centuries thereafter it was bound to the Roman Empire. In the 5th century A.D., it was overrun by the Franks and other barbarian tribes. Between 768 and 814, Charlemagne created a Frankish empire covering most of Western Europe, but by the time Hugh Capet came to the throne in 987, his kingdom comprised only the region around Paris. For more than 300 years the Capets struggled to unify the many feudal fiefs.

Phillip VI, cousin of the last Capet and first of the House of Valois, took the throne in 1328. Soon thereafter began the Hundred Years' War (1338-1453), the struggle over England's bid to seize the French crown. The English won at Crécy in 1346 and at Agincourt in 1415, but were defeated at Orléans in 1429 by the French forces led by Joan of Arc. Cruel persecution of French Protestants, the Huguenots, was followed by civil war and then the Edict of Nantes in 1598, by which the Huguenots received complete religious freedom from Henry IV, first of the Bourbons.

Splendor, wealth and the establishment of a colonial empire marked the long reign of Louis XIV from 1643 to 1715. Extravagance, however, forced Louis XVI to struggle with the problem of taxation at a time when the forces of revolution were coming to a head among France's lower and intellectual classes. The French Revolution, of world significance for its impact on absolute rule, broke out in 1789. Louis XVI was deposed in 1792 and executed the next year. Then came the Reign of Terror as the revolution swung to excess, the Directory from 1795 to 1799, and the Consulate from 1799 to 1804, after which Napoleon was proclaimed emperor. Meanwhile, French armies were engaged on all sides, spreading French hegemony over most of western and central Europe. The final downfall came at Waterloo on June 18, 1815.

The restored Bourbon, Louis XVIII, reigned until 1824 and was succeeded by his reactionary brother, Charles X, who was overthrown in the revolution of 1830. His successor, Louis Philippe, was unseated in 1848, and succeeded by Napoleon's nephew, Louis. Inaugurated president of the Second Republic in 1848, Louis Napoleon became emperor as Napoleon III in 1852 but abdicated after France's defeat in the Franco-Prussian War of 1870-71. The resultant conflict between republicans and monarchists was resolved by the adoption of a republican constitution in 1875, which es-

established the Third Republic to replace the provisional Republic set up in 1871.

The French constitution of 1946 provided for establishment of the French Union, consisting of the French Republic (metropolitan France and the overseas departments, territories and trusteeships) and the associated territories and states. The overseas departments are Algeria (three departments), Martinique, Guadeloupe, French Guiana and Réunion.

The overseas departments and territories are represented in the National Assembly by 75 deputies and in the Council of the Republic by 65. In addition the constitu-

tion provided for creation of a high council, consisting of nominees of the French government and of the associated states, and an Assembly of the French Union, with power that is mainly advisory. The Assembly, which met for the first time on Dec. 10, 1947, consists of 240 delegates, 120 of whom are elected by the French parliament, 75 by territorial assemblies overseas, and 45 by the associated states.

Article 61 of the constitution provides that the position within the Union of the associated states—tentatively described as French Morocco, Tunisia and the Federation of Indo-China—is "settled for each of

FRANCE AND THE FRENCH OVERSEAS TERRITORIES

Country	Area, sq. mi.	Population, estimated
France	212,741	40,517,923 (1946)
Africa		
French Equatorial Africa	959,983	4,003,733 (")
Chad	454,940	1,902,221 (")
Gabon	91,405	383,715 (")
Middle Congo	175,630	655,497 (")
Ubangi-Shari	238,008	1,062,300 (")
Cameroun	169,436	2,815,000 (1945)
Algeria	851,078	8,983,100 (1947)
Morocco	153,870	8,617,000 (")
Tunisia	60,209	3,463,328 (")
French West Africa*	1,816,099	15,937,000 (1945)
Dahomey	43,282	1,458,000 (1946)
Dakar and dependencies*	62	151,000 (")
French Guinea	97,247	2,125,000 (")
French Sudan	480,417	3,797,000 (")
Ivory Coast	184,255	4,021,000 (")
Mauritania	433,532	497,000 (")
Niger	499,555	2,168,000 (")
Sénégal*	77,749	1,720,000 (")
Togo	20,463	865,000 (1945)
French Somaliland	8,376	44,800 (1946)
Madagascar and dependencies	229,438	4,175,000 (")
Réunion (Bourbon)	970	221,000 (1944)
America		
St. Pierre and Miquelon	93	4,354 (1945)
French Guiana	7,720	31,000 (1939)
Iniini	27,020	6,000 (")
Guadeloupe and dependencies	686	310,000 (")
Martinique	427	270,110 (1944)
Asia		
French India	197	329,000 (1944)
Indo-Chinese Federation	285,794	23,700,000 (1939)
Annam	56,974	5,989,302 (1938)
Cambodia (Cambodge)	69,866	3,046,000 (1936)
Cochin-China	24,974	4,616,000 (")
Laos	89,320	1,012,000 (")
Tongking	44,660	8,700,000 (")
Oceania		
French Pacific Settlements	1,545	51,221 (1941)
New Caledonia and dependencies	7,654	61,250 (1947)
New Hebrides	4,633	48,815 (1946)

*The subdivision of Haute Volta was re-established in 1947, and Dakar was merged with Sénégal.

them by the act which defines their relations with France." Thus far, both Morocco and Tunisia have declined to modify their protected status in favor of a closer bond with France. French efforts to form an Indo-Chinese Federation comprising all of Indo-China have also been unsuccessful.

Victorious with the Allies in World War I under Premier Georges Clemenceau, France emerged as the dominant power on the continent. From 1919 on, its aim was to keep Germany weak through a system of military alliances and by maintaining a strong French army.

The effort was a dismal failure. At home France was weakened by economic and political instability, with many short-lived cabinets. Germany became a dictatorship, with the full national energy bent toward war. The Third French Republic, permitting political freedom, bickered and argued away its years. The leftist "Popular Front" coalition cabinets of Léon Blum (1936-37) and Camille Chautemps (1937-38) were succeeded by the Radical and Radical-Socialist cabinet under Édouard Daladier, one of the men of Munich.

Paul Reynaud took Daladier's place on March 21, 1940, less than seven months after the start of World War II. In May, 1940, Hitler's armies finally poured into France and on June 16, the reins of government fell to Marshal Henri Philippe Pétain, who opposed continuation of the war. An armistice with Germany was signed June 22, dividing France into occupied and unoccupied zones. The Third Republic was voted out of existence on July 10 by the National Assembly at Vichy, and Unoccupied France became totalitarian, with Pétain as chief of state.

Meanwhile, in London, General Charles de Gaulle had formed on June 18, 1940, a provisional French National Committee which received British recognition and represented the interests of free Frenchmen. De Gaulle's government-in-exile was moved to Algiers in June, 1943, as the French Committee for National Liberation.

After the liberation of Paris, De Gaulle formed a provisional government in the capital on Sept. 10, 1944. It remained in power as a theoretically non-political régime until the elections of Oct. 21, 1945, when a National Assembly was selected to draw up a new constitution and serve as an interim legislative body. De Gaulle was named provisional president on Nov. 13 but resigned soon after and was succeeded by Félix Gouin, a Socialist, on Jan. 23, 1946.

A proposed constitution providing for a strong legislature and weak executive was rejected by the electorate on May 5, 1946. The new National Assembly, elected June 2, named Popular Republican Georges Bidault as interim President. France's new constitution was approved by a narrow margin

on Oct. 13, and the Fourth Republic formally took shape early in 1947 with the election of Socialist Vincent Auriol as President, Jan. 16, and the confirmation of Socialist Paul Ramadier as Premier, Jan. 22.

Ramadier was succeeded on Nov. 22, 1947, by Robert Schuman, also a Popular Republican, whose government was beset on one hand by Communist agitation, and on the other by General de Gaulle's campaigns for new elections. De Gaulle's new party, the Rally of the French People, had shown surprising strength in the municipal elections of Oct., 1947.

Socialist demands for reduction of the armed forces budget forced Schuman's resignation on July 19, 1948; he was succeeded by Radical-Socialist André Marie. Marie resigned late in August and Schuman formed another cabinet, which lasted approximately 64 hours. Henri Queuille replaced Schuman on Sept. 7 and was confirmed three days later when he presented an acceptable cabinet.

GOVERNMENT. Under the constitution approved Oct. 13, 1946, France is a secular, democratic and social republic. The dominant power in the new Republic is the National Assembly, whose members (618 in 1947) are elected by universal direct suffrage. There is also a Council of the Republic of 315 members elected by a complicated indirect procedure requiring 8 different elections. This house has only advisory and delaying powers and is definitely subordinate to the Assembly. The two Houses together elect the President of the Republic for a 7-year term, but his choice of a Premier and the latter's choice of cabinet ministers require Assembly ratification. All ministers are collectively responsible to the Assembly for the general policy of the Cabinet and are individually responsible for their personal actions.

The National Assembly elections of Nov. 10, 1946, resulted in a considerable gain for the Communists; they and their affiliated groups secured 182 seats, the Popular Republicans (MRP) and their affiliated groups, 166; Socialists, 102; others, 168.

The Cabinet formed Sept. 10-11, 1948, contained 8 Socialists, 9 Popular Republicans, 7 Radicals, and 8 Independents and minor party members. Communists have been excluded from the government since April 30, 1947.

DEFENSE. France's 1948 army, comprised about 465,000 men recruited under a conscription system. Forces outside France included about 60,000 in Germany, 7,000 in Austria, several thousand in Madagascar, 100,000 in North Africa and 110,000 in Indo-China. The strength of the air force was stabilized at 58,000 and that of the navy at 77,000. The navy, decimated by wartime losses and scuttlings, had 3 battle-

ships, one fleet carrier (formerly H.M.S. *Colossus*, 14,000 tons), one escort carrier, 9 cruisers, 14 submarines, 28 destroyers and large torpedo boats, and several hundred smaller craft to equal about 250,000 tons. The budget allocation for defense is 33 percent.

EDUCATION. State elementary schools in 1946 numbered 68,190, with 3,675,000 students enrolled. There were also 11,260 private elementary schools with 993,000 students. Secondary education for boys—comprising a 7-year course—is provided in *lycées*, classical and modern schools maintained by the state (527 in 1944 with 205,000 students), communal colleges and free schools. Girl students enrolled in *lycées* and classical and modern schools in 1944 numbered 141,000 in 388 institutions.

Higher education is provided chiefly in the universities, of which there are 17 in France with total enrollment of 97,007 in 1945-46. The largest, the University of Paris, had an enrollment of 40,200 in 1943.

RELIGION. The predominant faith is Roman Catholicism, but Church and State were separated in 1905. Diplomatic relations with the Vatican were resumed in 1921, and lesser church property was returned to diocesan associations in 1924.

POPULATION. The people are not homogeneous, varying from section to section. During the inter-bellum period, the population remained almost static, with an increase of only 72,133 from 1931 to 1936 and a decrease of 3.3 percent from 1936 to 1946. The birth rate also fell sharply (1925: 19.6; 1936-38 annual average: 14.8), but the end of World War II saw an uptrend, with an estimated rate of 16.2 in 1945, 20.6 in 1946, and 21.0 in 1947. In 1946, for the first time in 11 years, births (835,000) exceeded deaths (542,000).

AGRICULTURE. The national economy of France is predominantly agricultural. Of the total area, approximately 40 percent is ordinarily devoted to crops, 20 percent to forests, 3 percent to vines and two percent to market and other gardening. The vast majority of holdings are small farms worked by the owners. France normally is almost self-sufficient in basic foodstuffs and leads the world in wine production.

Production of major crops in 1947, in metric tons (1938 production in parentheses), was as follows: wheat 3,266,000 (9,801,000); rye 384,000 (811,131); barley 1,122,000 (1,290,780); oats 2,813,000 (5,457,438); potatoes (1946) 12,167,000 (17,314,529); and sugar beets 5,892,000 (7,894,873).

Other important crops are artichokes, berries, fodder beets, fruits, hay, nuts and turnips. Silk culture once thrived in the lower Rhône valley, but production fell sharply between wars. Milk, butter, cheese, eggs and poultry have become increasingly important as exports. Livestock in 1947 in-

cluded 15,100,000 cattle, 7,330,000 sheep and 5,700,000 hogs. Wine production in 1947 was 1,167,341,000 American gallons.

INDUSTRY. Principal industrial areas are Paris, Artols, Lower Seine and Lyon; the textile industry is concentrated in the north. Leading manufactures are iron, steel, chemicals, textiles, automobiles, machinery and beet sugar. Industrial production in 1947 was estimated at 95 percent of prewar totals, and reached 110 percent in March, 1948.

FRENCH INDUSTRIAL PRODUCTION

Monthly averages, 1938 and 1947
(in metric tons)

Product	1938	1947
Pig iron and ferroalloys	501,000	407,000
Steel ingots and castings	518,000	479,000
Cement	296,000	321,000
Passenger cars	15,201*	5,523*
Sulfuric acid	106,000	89,114
Superphosphates	114,000	117,823
Cotton yarn	20,810	16,981
Cotton fabrics	12,083	11,194
Wool yarn	9,840	9,683
Wool fabrics	6,650	6,018
Electricity	1,547†	2,094†

*Units. †Millions of Kwh.

TRADE. Foreign trade statistics, in billions of francs, are as follows:

	1938	1946	1947
Exports	30.8	101.4	213.4
Imports	46.3	234.0	346.7

Exports in 1947 totaled 13,760,000 tons (1946: 9,987,909 tons), and imports 37,490,000 tons (1946: 30,420,787 tons). The principal suppliers were the U. S., 26.7 percent; French Union, 25.4 percent; Belgium-Luxemburg, 5.2 percent, and Germany, 3.9 percent. The chief customers were French Union, 40.6 percent; Belgium-Luxemburg, 12.1 percent; Britain, 6.9 percent, and Switzerland, 6.2 percent.

COMMUNICATIONS. The French merchant marine had 973 ships in 1947 with a gross tonnage of 2,314,898—fifth largest in the world.

There are about 5,500 miles of navigable waterways, including canals with a traffic of 27,580,000 short tons in 1945. There are approximately 550 inland navigation ports, of which Paris, Rouen and Strasbourg each normally handle more than one million tons annually (Paris, more than ten million tons). Railway mileage in 1945 totaled 25,271; destruction by Allied bombing and by military operations after the Normandy landings was enormous. Railroads were merged in 1938 into the *Société Nationale des Chemins de Fer Français*, of which the government acquired controlling interest. Highway mileage in 1939 was 393,761.

Air France, nationalized on Jan. 1, 1946, operates on a world-wide basis, using U. S.-built aircraft for the most part. Miles scheduled per week by regular air services on April 1, 1947, totaled 71,624 on domestic routes and 222,412 on international routes.

FINANCE. France's postwar financial position has been extremely unstable. The 1947 ordinary budget, as revised in Sept., 1947 placed expenditures at 617,600,000,000 fr. and revenue at 610,520,000,000 fr. Estimated revenue and expenditure from operation of the treasury balanced at 355,000,000,000 fr. Actual expenditure in 1946 was 1,286,896,000,000 fr. and actual revenue 815,637,000,000 fr. The internal debt on Dec. 31, 1946, was 2,195,643,000,000 fr. On Dec. 2, 1945, the Bank of France and four large private banks were nationalized, and commercial credit came under government supervision.

TOPOGRAPHY. With a maximum length of about 600 miles and a width of 550 miles, France is second in size to Russia among Europe's nations. Its coastline is about 1,950 miles. In the Alps near the Italian and Swiss borders is France's highest point—Mont Blanc, 15,781 feet. The forest-covered Vosges Mountains are in the northeast and the Pyrenees are along the Spanish border. Except for extreme northern France, which is part of the Flanders plain, the country may be described as four river basins and a plateau. Three of the streams flow west—the Seine into the English Channel, the Loire into the Atlantic, and the Garonne into the Bay of Biscay. The Rhône flows south into the Mediterranean. For about a hundred miles, the Rhine is France's eastern border. West of the Rhône and northeast of the Garonne lies the Central Plateau, covering about 15 percent of France's area, and rising to a maximum elevation of 6,188 feet. In the Mediterranean, 115 miles east-southeast of Nice, is Corsica, the island of Napoleon's birth, with an area of 3,367 square miles.

MINERALS. French coalfields, most extensive in the northeast, ordinarily supply about 70 percent of domestic needs. Lorraine, Anjou and Normandy have valuable iron ore deposits. Provence has bauxite. Alsace has potash and oil. Limousin has kaolin, zinc, lead and tar.

MINERALS, 1938 and 1946

(in metric tons)

Mineral	1938	1946
Coal	46,502,000	47,205,600*
Iron ore	33,062,400	16,214,400
Bauxite	684,960	451,860
Lead ore	5,736	11,664
Potash salts	3,310,800	3,286,572

*Approximate.

FORESTS AND FISHERIES. France, with over 26,000,000 wooded acres, produces well over \$100,000,000 worth of forest products

in a normal year, including resin, turpentine, timber and nuts. The annual fish catch is normally second only to that of Britain among the nations of Europe. Cod and sardines are usually the biggest items; others are coalfish, herring, whiting, mackerel, tunny, lobster, oysters, rays, flounder, and sole.

CLIMATE. France's climate is temperate but varies from long cold winters and hot summers in the northeast, to the sub-tropical temperature of the Mediterranean coast with very mild winters. With no high western elevations to block moisture-laden winds from the Atlantic, all France has adequate rainfall of 20 to 30 inches a year. The mean annual temperature at Paris is 50.5° (36.5° in January and 65.5° in July). The rainiest months are June and October, with February usually the driest.

Andorra

This 191-square mile autonomous and semi-independent state on the Franco-Spanish border has been under the joint suzerainty of the French State and the Spanish bishops of Urgel since 1278. It is a cluster of mountain valleys inhabited by about 5,200 stubborn and traditionally independent people whose principal pursuit is the tending of flocks. Catalán is the language spoken, and both French and Spanish currency are in use. Andorra is governed by a Council General of 24 members, elected for four years by the heads of families. A First Syndic, chosen by the Council, constitutes the supreme executive authority.

French Overseas Territories

AFRICA

Algeria (Part of Metropolitan France)

(L'Algérie)

Governor General: Edmond Naegelen.

Principal cities (est. 1947): Algiers, 360,700 (capital); Oran, 252,500 (seaport); Constantine, 121,200 (trading center); Bône, 82,400 (seaport; phosphates).

Monetary unit: French franc.

Languages: Arabic, French.

Religions: Mohammedan (natives), Roman Catholic, Jewish.

HISTORY. Algeria, more than three times the size of Texas and situated on the northern bulge of Africa, was of great strategic importance during World War II. After U. S. and British troops occupied it following the landings of Nov. 8, 1942, it became the headquarters of the provisional French government of General Charles de Gaulle until the summer of 1944. For many months during that period it was the headquarters of the Allied Expeditionary Force.

Algeria became a Roman colony after the fall of Carthage in 146 B.C. and was overrun by the Arabs in the 7th, 11th and 12th centuries. In the 13th century it became one of the three kingdoms founded on the ruins of the old Almohade Empire. Following a brief Spanish occupation, it went under Turkish suzerainty in 1518. For 300 years thereafter Algiers was the headquarters of the notorious Barbary pirates who preyed on Mediterranean shipping. The French ended Turkish rule by taking Algiers in 1830, but it was not until 1847 that they were able to suppress a holy war instigated in 1839 by Abd-el-Kader.

French policy for a time vacillated between complete assimilation of Algeria as part of France, and a decentralized administration under a governor general. In 1896 the idea of assimilation was abandoned for a number of years. After France fell in 1940, Algerian government officials were loyal to Vichy, but their control was ended by the Allied invasion of the African coast in 1942.

GOVERNMENT. In effect, Algeria is part of France. Its three departments are represented in the National Assembly by 15 deputies, and it is one of the ten military districts of France, with both French and natives subject to military service. The governor general is responsible to the Interior, rather than Colonial, Ministry in the French Cabinet. A statute enacted in Aug., 1947, gave Algeria an elected legislative assembly, but leadership of the government still remains with the governor general.

SOCIAL AND ECONOMIC CONDITIONS. Primary and secondary schools for Europeans are on French lines. Most natives do not go beyond the primary grades. The knowledge and use of French has spread widely among the natives, but the teaching of Arabic in all schools was made compulsory in 1946. There is a university at Algiers, with faculties of science, arts, law, medicine and pharmacy.

Approximately 86 percent of the population is native, 12 percent French and 2 percent other European. The native population is Berber, with Arab admixture physically assimilated.

The area under cultivation is about 25,000,000 acres, more than 20 percent of which is owned by European farmers, chiefly in the fertile coastlands. The principal crops are wheat, barley and oats. Algeria is a leading wine producer, with almost 4 percent of the cultivated area devoted to vines. Production in 1947 was 219,392,000 gallons, less than 50 percent of normal. Olive trees are widespread; the average annual yield of oil is about 2,500,000 gallons. Tobacco, corn, vegetables, flax, silk, figs and dates are also produced. Much of the area is more adapted to graz-

ing than to agriculture. In 1947 there were 3,144,680 sheep, 2,525,320 goats, 899,430 cattle and 141,650 camels.

European industries include those dependent on crops, such as distilling and oil and flour milling, as well as the making of leather, tobacco and matches. There are also small native industries, particularly the traditional carpet weaving.

Exports in 1947 were valued at 41,199,955,000 fr. and imports at 45,547,017,000 fr. Chief exports were wine, 41.5 percent; dried figs, 8.1 percent, and dates, 5.5 percent. Chief imports were cotton textiles, 6.9 percent; sugar, 5.5 percent, and oil, 4.4 percent. France took 85 percent of the exports and supplied 64 percent of the imports.

Algeria has 3,396 miles of railway. A central line runs from the Moroccan to the Tunisian frontier with branches north to all the ports and south into the Southern Territories. There is an excellent network of roads of more than 30,000 miles, and motor transport is well developed, including regular passenger and freight lines across the Sahara. Only French ships may normally trade between France and Algeria.

Revenue in 1948 was estimated at 37,319,163,000 fr. and expenditures at 37,282,055,000 fr.

Algeria is a leading producer of phosphates (1947: 706,878 metric tons). Iron ore of good quality is found near the Tunisian frontier and on the Oran coast (1947: 1,555,722 tons). Zinc, lead and salt are also important minerals; and small amounts of oil and coal are produced.

Forests, mostly scrub, cover about 6,000,000 acres; cork is the leading product. Fish products include anchovies, sardines, shellfish, spray and tuna.

TOPOGRAPHY AND CLIMATE. Algeria fronts on the Mediterranean for more than 700 miles. Northern Algeria extends inland for 185 to more than 200 miles. South of it are the big, economically unimportant Southern Territories. Low plains cover small areas near the coast, but 68 percent of Algeria is a plateau between 2,625 and 5,250 feet above sea level. The region between the Sahara and the Mediterranean reaches a high point of 7,641 feet.

Most of the streams are periodic with the rains. The Chélif is the principal river, over 435 miles long. On the Saharan slopes, the oases or the hot sands absorb the streams as soon as they leave the mountain ridges.

Rainfall averages 20 to 40 inches on the coast, and decreases to virtually none in the Sahara. On the coast, temperatures average about 52° in winter, 77° in summer. Inland, the winter average is about 40° and summer about 81°, although the Sahara summer average is from 95° to 105°.

CAMEROUN (FRENCH CAMEROONS)—Status: U. N. trust territory.

Capital: Yaoundé (population: 18,754).

High Commissioner: René Hoffer.

Foreign trade (1945): exports, 625,300,000 fr.; imports, 435,500,000 fr. **Chief exports:** cacao, palm kernels and oil, coffee.

Agricultural products: sweet potatoes, millet, cacao, bananas, palm kernels and oil.

Minerals: diamonds, gold, tin.

Forest product: timber.

Cameroun is bounded principally by French Equatorial Africa, except for the Atlantic Ocean on the west, the British Cameroons on the northwest, and Rio Muni on part of its southern boundary.

In 1884 the Cameroons became a German colony (Kamerun), and after the conclusion of World War I the region was divided as a League mandate between Britain and France, four-fifths of the area going to France. The new U. N. trusteeship area has political and financial autonomy under a French High Commissioner, responsible to the French government and to the administrative council of French Equatorial Africa. Cameroun joined the Free French movement in 1940. The chief port and commercial center is Douala (pop. 1944: 36,040); the administrative center, Yaoundé, is located on the central plateau.

The climate is tropical and unhealthy for Europeans; not even in the cool months does the temperature generally fall below 70°. Rainfall is heavy on the coast and is fairly evenly distributed through the year.

FRENCH EQUATORIAL AFRICA—Status: Colony.

Governor General: M. Cornut-Gentile.

Capital: Brazzaville (population 24,941).

Foreign trade (1945): exports, 685,500,000 fr.; imports, 878,200,000 fr. **Chief exports:** gold, wood, cotton, wool, palm kernels and oil.

Agricultural products: cotton (1946: 250,000 quintals), wool, palm kernels and oil, coffee.

Minerals: gold, zinc ore.

Forest products: timber, rubber, copal gum, wax.

The colony lies in west central Africa, bordered on the west by the Atlantic, Cameroun, Nigeria and French West Africa; on the north by Libya; on the east by Anglo-Egyptian Sudan; and on the southeast and south by Belgian Congo. The coast, an early slaving center, was first settled by the French in 1839; French hegemony was subsequently extended by exploration and conquest of the native tribes. The territory declared for Free France following the armistice of June, 1940, and Brazzaville became capital of De Gaulle's Free French movement.

The governor general, responsible to the Minister of Colonies in the French Cabinet, administers the whole area as an administrative unit with the aid of an administra-

tive council; each of the four territorial regions (Gabon [Gabun], Middle Congo, Ubangi-Shari, Chad) has a governor responsible to him. There were, in 1946, 8,333 Europeans; most of the Africans are Negroes. There are Arab and Fulani settlements in the Chad region, and several Moslem sultanates. Natural resources, both forest and mineral, are vast but relatively unexploited. The country's economic life depends primarily on the forest products. The colony is capable of exporting large quantities of hard okoumé wood, either in logs or in veneer form.

The climate is tropical—hot and humid—and the average temperature is about 80° (78° at Brazzaville), varying only slightly throughout the year. Rainfall averages about 60 inches annually, with no marked wet or dry seasons.

FRENCH SOMALILAND—Status: Colony.

Capital: Djibouti (population 20,000).

Governor: Paul H. Sirieux.

Foreign trade (1945): exports, 11,400,000 fr.; imports, 112,400,000 fr. **Chief exports:** coffee, hides, salt.

Mineral: salt.

French Somaliland, at the southern entrance to the Red Sea, was acquired by France between 1883 and 1887 by treaties with the Somali sultans, although posts on the coast had been acquired in 1856. This small, largely arid and sparsely populated region is important chiefly because of the port of Djibouti, the main artery of Ethiopia's trade via the Djibouti-Addis Ababa railway. The colony is administered by a governor, responsible to the French government and assisted by an advisory council. It adhered to the Free French movement by an agreement initiated in December, 1942. In 1944 there were 629 Europeans.

French West Africa (Colony)

(L'Afrique Occidentale Française)

Governor General: Paul Béchard.

Principal cities (est. 1943): Dakar, 98,700 (capital, chief port); St. Louis, 43,200.

Monetary unit: French franc.

Languages: French native tongues.

Religions: Mohammedan, Pagan.

HISTORY AND GOVERNMENT. The St. Louis Colony, founded in 1626 at the mouth of the Sénégal River, was probably the first permanent white settlement in French West Africa in which the French established themselves, largely for the purpose of pursuing the slave trade. Little progress inland was made until after 1854, when a scheme was conceived to link the upper Sénégal with the upper Niger. After 1876 the coast settlements were extended steadily into the interior through a series of

missionary and economic campaigns. In 1895 the colony of French West Africa was formed under one governor general by the unification of its various components.

The governor general of the colony is appointed by the French government and is assisted by a legislative council and an elected assembly. Governors responsible to him administer the eight constituent colonies—Sénégal, French Guinea, the Ivory Coast, Dahomey, Haute, Volta (re-established in 1947), French Sudan, Mauritania and Niger. Each of these has considerable autonomy, with the central colonial government supervising services common to all. The area is represented in the French National Assembly, the Council of the Republic, and the Assembly of the French Union.

SOCIAL AND ECONOMIC CONDITIONS. Attendance at elementary schools in 1945 was approximately 75,000, including 1,100 European children. There were 15 higher primary schools with 2,450 students, and three secondary schools, with 700 students. Private schools enrolled approximately 31,000.

No racial unity exists in French West Africa, and there is great variation of physique, manner, custom and language. The population is native except for approximately 28,000 French (1945) and 9,000 other Europeans. Non-Negroid tribes include the Saharans, Moors, Tuaregs and Fulbé. About half the population normally is Mohammedan, but a number of tribes have remained spirit worshippers.

Agriculture has expanded rapidly in recent years. Millet, rice and maize are the principal food crops, and vegetable oils are a leading commercial product. Peanuts, the chief export crop (1947-48: 425,000 metric tons) are cultivated in Sénégal, and palm kernels and oil are produced in Dahomey and the Ivory Coast. Other products are coffee, cotton, cacao and bananas. Stock raising is important in French Sudan and Mauritania, relatively dry districts in the northern part of the colony. Manufacturing is undeveloped except for small native industries. Expansion is hindered by limited power facilities.

Imports in 1946 totaled 5,990,770,000 fr., including cotton cloth, metal products, vehicles, machinery, beverages, foodstuffs and petroleum. Sénégal and the Ivory Coast account for over half the exports, which totaled 4,120,592,000 fr. in 1946 and included peanuts (33%), coffee, bananas, cotton, cacao, palm kernels, vegetable oil and livestock.

The middle Niger and lower Sénégal Rivers are navigable, but French West Africa's railways (1945: 2,700 mi.) are more important as interior communications. Dakar, with the best harbor on the west African coast, is the principal port and also an

important stop on international air routes between South America and Europe. There are several other good ports.

The estimated budget for 1946 balanced at 6,157,000,000 fr., about a third of which was the total local budget of the eight component colonies.

Gold, found in alluvial deposits in Sénégal and in veins in the Ivory Coast (1946 exports: 1,569 kg.) and diamonds are the only important minerals. Timber and precious woods are important, especially in the Ivory Coast. Forest products include timber, mahogany logs, gum arabic, shea butter (a solid, white fat obtained from the seeds of the shea tree) and nuts, kapok and beeswax. In 1946, 1,041 metric tons of rubber were exported.

TOPOGRAPHY AND CLIMATE. The colony, comprising a sixth of Africa, is half as big as Europe; it is generally a plateau broken by two mountain ranges. The Futa Jallon, from 2,300 to 4,900 feet in elevation, parallels the coast for about 430 miles, and Mount Nimba, on the Liberian border, rises 5,250 feet. There are also mountainous regions in the Sahara districts to the north. The Niger, 2,600 miles long, is the principal river.

The central and northern parts of the colony have two seasons, rainy and dry. In the southernmost regions there are two rainy seasons, separated by a short dry season. Average annual rainfall at St. Louis is 16.7 inches; at Dakar, 20.2 inches. Temperatures on the west coast average about 70° in winter and 82° in summer, with daily variation of about 20°.

MADAGASCAR AND DEPENDENCIES—Status: Colony.

Capital: Tananarive (Antananarivo) (est. pop. 1946: 170,000).

Governor General: Pierre de Chevigne.

Foreign trade (1946): exports, \$39,671,000 (58% to France, 19% to U. S.); imports, \$31,023,000 (30% from France, 23% from U. S.). **Chief exports:** vanilla 21%, coffee 15%, meat honey, manioc.

Agricultural products (1946): rice (7,000,000 quintals); coffee (300,000 quintals), sugar cane (2,300,000 quintals), vanilla, manioc, bananas, corn, coconuts, sweet potatoes.

Minerals: gold, graphite (1946 exports: 8,875 metric tons), mica, phosphates.

Forest products: gum, medicinal plants, rubber, tannins, dyewoods.

Madagascar, lying off the southeast coast of Africa, is the fourth largest island in the world, with a length of 995 miles and an average width of 250 miles. It remained independent under native rulers until 1885, when it came under French protection. French troops conquered the island in 1895 and it became a French colony the following year. The last native ruler, Queen Rānavàlona III, was exiled.

British troops landed on the island May 5, 1942, during World War II, and an

armistice with Vichy French forces was signed November 5, 1942. The island is administered by a governor general responsible to the minister of colonies in Paris, assisted by a recently created General Assembly. Native nationalist outbreaks occurred in 1947, and French troops maintained order with difficulty.

The chief occupations are cattle raising (1946: 5,940,000 cattle) and agriculture; there are several food-processing and textile plants. The chief port is Tamatave on the east coast; the capital, Tananarive, is located on the central plateau. In 1941 there were 52,383 French and other non-native residents, including Hindus, Arabs and other Asiatics. The natives, collectively known as Malagasy, are divided into several tribes. Outlying dependencies include the islands of Europa, Juan da Nova, Bassas da India and Glorieuses.

The Comoro Islands (800 sq. mi.), formerly a dependency, became an autonomous territory in 1946, under the direct administration of the colonial ministry in Paris.

The climate of Madagascar is generally tropical, with a warm and wet season from November to April and a cool, dry season the rest of the year. Temperatures vary between 55.5° and 95° (at Tamatave, 80° in February, 68° in July).

MOROCCO; see page 530.

RÉUNION (Bourbon)—Status: Département of Metropolitan France.

Capital: St. Denis (population: 32,637).

Prefect: Paul Demange.

Foreign trade (1945): exports, 458,729,000 fr.; imports, 275,282,000 fr. Chief exports: sugar, essential oils (geranium oil, oil of vetiver, oil of lang-iliang).

Agricultural products: sugar, vanilla, coffee, maize.

Discovered by Portuguese navigators in the 16th century, the island, then uninhabited, was taken as a French possession in 1638. It is located about 450 miles east of Madagascar, in the Indian Ocean.

There is no indigenous population. About three-quarters of the inhabitants are of European origin; the remainder are Creoles, mulattoes, Negroes, Indians and other Asiatics. Tropical cyclones of hurricane variety are frequent during the change of seasons; one of the most recent (Jan., 1945) caused damage of over \$1,000,000. Occasionally a *raz de marée* (tidal wave) does great damage. Sugar-cane cultivation and the production of rum are the principal occupations.

TOGO—Status: U. N. trust territory.

Capital: Lomé (population 27,928).

Commissioner: Jean Cédile.

Foreign trade (1945): exports 163,400,000 fr.; imports 138,700,000 fr. Chief exports: cacao, palm kernels, corn, cotton, copra.

Agricultural products: cacao, palm kernels and oil, cotton, copra, coffee.

Mineral: iron ore.

Forest products: dye woods, oil palms.

Togo, a part of the former Slave Coast, lies between the British Gold Coast colony and French West Africa. Established as a German colony in 1884, the area was divided as a League mandate by France and Britain at the end of World War I, with France obtaining two-thirds of the total area. It was placed under U. N. trusteeship in Dec., 1946.

Togo is administered by a commissioner responsible to the French government, assisted by an economic and financial council composed of officials, merchants and nine elected native delegates. Agriculture and grazing are the chief industries. In 1945, there were 638 Europeans. The coastline, only 32 miles long, is low, sandy and without harbors.

The coastland climate is hot, humid and unhealthy, with wet seasons lasting from March to June and from September to November.

Tunisia (Protectorate)

Ruler (Bey): Sidi Mohammed al-Amin.

French Resident General: Jean Mons.

Prime Minister: Mustapha Saak.

Principal cities (census 1946): Tunis, 603,766 (capital); Sfax, 285,559 (phosphate port); Bizerte, 238,284 (seaport and naval base); Sousse, 264,157 (seaport).

Monetary unit: French franc.

Languages: Arabic, French, Italian.

Religion: Predominantly Mohammedan.

HISTORY. Tunisia was settled by the Phoenicians and Carthaginians in ancient times. Except for an interval of Vandal conquest in A.D. 439-533, it was part of the Roman Empire until the Arab conquest of 648-69. Then it was ruled by various Arab and Berber dynasties until the Turks took it in 1570-74. The founder of the present dynasty, Hussein ben'Ali, was proclaimed sovereign by the occupation troops in 1705 and later succeeded in making the office hereditary, although subject to nominal Turkish sovereignty.

Throughout much of its history, Tunisia was essentially a pirate state, preying on Mediterranean shipping. In modern times, Italy became predominant economically in the area, but after French troops occupied the area in 1881, the Bey signed a treaty acknowledging a French protectorate.

Following the Allied landings in North Africa in 1942, Tunisia became a battleground with the Axis forces pinched between the British 8th Army advancing from Libya and the U. S., British and

French forces from Algeria. The Axis units surrendered in May, 1943, and Tunisia was turned over to the De Gaulle government. On May 15, 1943, the reigning Bey, Sidi Mohammed al-Mounsaf, was removed and replaced by his cousin, the present ruler.

Fanned by Arab nationalist agitation elsewhere, the Tunisian nationalist party, *Destour*, although banned by the French, has intensified its activity in recent years. Its aim is the complete independence of Tunisia and its adherence to the Arab League.

GOVERNMENT. Although the Bey is theoretically sovereign, a French resident general actually controls all military and civil affairs, assisted by a cabinet. Local administration is conducted by native officials under the close supervision of the French. The Southern Territory is subject to military administration.

SOCIAL AND ECONOMIC CONDITIONS. In 1946 Tunisia's 494 public and 88 private schools had 130,031 pupils, about a third of them French and Italian. The Great Mosque at Tunis is a Moslem University.

Tunisia's population (by the 1946 census, 87.4 percent Arab) is concentrated in the cities and on the coast. There are about 100,000 nomads.

Agriculture is the chief industry. Over a quarter of the arable land is in wheat (1947: 250,000 metric tons). Other important crops are barley, oats, corn, sorghum, beans and peas. Average annual wine production is about 38,000,000 gallons (1947: 12,285,000). Average olive oil production is about 50,000 short tons annually, but it was only 11,700 in 1947. The Cape Bon region is largely devoted to citrus fruits, the southern oases to dates. In 1947 there were 1,752,000 sheep, 1,291,000 goats, 370,000 cattle and 203,600 camels. More than 50,000 sheep and 4,000 tons of wool a year are usually exported.

Leading industries include flour milling, oil refining, lead smelting and distilling. Native industries include the spinning and weaving of wool, and the making of pottery and leather goods.

Tunisia, Algeria and France are under a single customs union for a number of products. Exports in 1947 were valued at 6,302,500,000 fr., of which 54 percent went to France. They included phosphates (24%), fresh fruits (13%), wine, iron ore, lead, grains and dried fruits. Imports were 17,364,700,000 fr., of which 60 percent came from France. The leading items were metal products (16%), rice (9%), grains, textiles, machinery, automobiles and coal.

There were 5,350 miles of roads and 1,327 miles of railway in 1945. Tunis, Bizerte, Scusse and Sfax are the principal ports.

Ordinary revenue for 1946 was estimated at 4,201,760,000 fr., and expenditures about

the same. There was an extraordinary budget balanced at 6,475,420,000 fr. for public works, education and agricultural research. State monopolies, including tobacco, provide about 25 percent of the revenue and indirect taxes about half.

Tunisia's extremely rich deposits of phosphates are mined principally in the Gafsa and Kef regions. Production in 1947 was approximately 1,743,500 metric tons. Its iron ore is of good quality (1947: 399,400 tons). Other minerals are lead, zinc, mercury, manganese, copper, salt and poor-grade lignite.

Products derived from Tunisia's 2,500,000 acres of forests include lumber, mine props and cork. Alfa is exported, mainly to England, for the making of paper pulp. About 20,000 Tunisians work at fishing; the catch averages 8,000 tons of fish and 95 tons of sponges annually.

TOPOGRAPHY AND CLIMATE. Tunisia, at the northernmost bulge of Africa, thrusts out toward Sicily to mark the division between the eastern and western Mediterranean. It is mountainous in the north, covered by plains in the east, and projects southward to the Sahara area. Its principal river, the Medjerda, in the north, is 228 miles long. The climate is Mediterranean with mean temperature extremes at Tunis of 52.7° and 79.2°. Annual rainfall ranges from 24 inches in the north to less than five inches in the south.

WESTERN HEMISPHERE

FRENCH GUIANA (including ININI)—Status: Département of Metropolitan France.

Capital: Cayenne (population 10,961).

Prefect: Robert Vignon.

Foreign trade (1945): exports, 45,400,000 fr.; imports, 126,800,000 fr.

Agricultural products: bananas, cacao, corn, manioc, rice, sugar cane.

Mineral: gold (1947: 15,400 troy oz.).

French Guiana, lying north of Brazil and east of Surinam (Dutch Guiana) on the northeast coast of South America, was first settled in 1626. Penal settlements, embracing the area around the mouth of the Maroni River and the Iles du Salut (including Devil's Island), were founded in 1852; they are now being disbanded.

During World War II French Guiana at first adhered to the Vichy government, but the Free French took over in March, 1943. The large and scantily populated territory of Inini in the hinterland is administered separately. Economic development is extremely backward; transportation is almost entirely by water, conditions are unsanitary and large quantities of foodstuffs must be imported. Gold is the chief export.

January temperatures average 79°, September and October temperatures 82°. Rainfall is heavy.

GADELOUPE—Status: Département of Metropolitan France.

Capital: Basse-Terre (population 13,638).

Prefect: Gilbert Philipson.

Foreign trade (1946): exports, 1,495,000,000 fr.; imports, 1,115,000,000 fr. Chief exports: sugar, bananas, rum.

Agricultural products (est. 1946): sugar (44,800 metric tons), bananas (30,000 tons), coffee, cacao, manioc, tobacco, vanilla.

Guadeloupe, lying in the West Indies about 300 miles southeast of Puerto Rico, was discovered by Columbus in 1493. French colonization began in 1635. It consists of two large islands, separated by a narrow arm of the sea, and several outlying smaller islands. Most of the population is Negro and mulatto. The largest city and chief port is Pointe-à-Pitre (population 44,551). About half the cultivated area is devoted to sugar cane. The manufacturing of rum and spirits is the principal industry. Mean annual temperature is 78°.

MARTINIQUE—Status: Département of Metropolitan France.

Capital: Fort-de-France (population 64,525).

Prefect: Pierre Trouillé.

Foreign trade (1945): exports, 450,700,000 fr.; imports, 461,300,000 fr. Chief exports: sugar, rum, bananas.

Agricultural products (1946): sugar (25,900 short tons), bananas, pineapples, cacao, coffee.

Manufactures: rum, sugar.

Martinique, lying in the Lesser Antilles about 300 miles northeast of Venezuela, was probably discovered by Columbus in 1502 and was taken for France in 1635. Following the Franco-German armistice of 1940 it had a semi-autonomous status under the High Commissioner, Admiral Georges Robert, until 1943, when he relinquished his authority to the Free French. The colony, administered by a governor assisted by an elected council, is represented in the French legislature. The population is mainly Negro and mulatto. Most of the arable land is devoted to sugar cultivation. Fort-de-France, the capital and chief commercial center, has an excellent harbor. Mean annual temperature of the coast region is 80° (77° in January, 83° in June).

ST. PIERRE AND MIQUELON—Status: Colony.

Capital: St. Pierre.

Administrator: M. Moisset.

Foreign trade (1947): exports, 170,758,000 fr.; imports, 128,521,000 fr. Chief exports: cod and other fish products.

The sole remnant of the French colonial empire in North America, these islands were first occupied by the French in 1660. Their only importance arises from their proximity to the Grand Banks (they lie 10 mi. south of Newfoundland) which makes them the center of the French Atlantic cod fisheries.

ASIA

FRENCH INDIA—Status: Colony.

Capital: Pondichéry (population 53,101).

Governor: Charles Baron.

Chief exports: groundnuts, cotton textiles.

Agricultural products: groundnuts, manioc, rice, onions.

French India is a collective name for the scattered French possessions in India—on the Coromandel coast are Pondichéry, Karikal and Yanam; on the Malabar coast, Mahé; and in Bengal, Chandernagor. The chief possession is Pondichéry, founded by the French in 1674. The governor, responsible to the minister of colonies in Paris, is assisted by a representative assembly. More than 90 percent of the population of French India is Hindu.

Indo-Chinese Federation

High Commissioner: Emile Bollaert.

Principal cities (census 1936): Hanoi, 149,000 (capital); Cholon, 145,000 (commercial center); Saigon, 111,000 (chief port; rice); Phnom Penh, 103,000 (capital, Cambodia).

Monetary unit: Piaster.

Languages: Annamese, Cambodian, French.

Religions: Buddhism, Christianity (4%).

HISTORY AND GOVERNMENT. The Indo-Chinese Federation (French Indo-China), at the southeast corner of Asia, first met the West in the 16th century, when Portuguese traders and missionaries arrived. French influence dates from 1787, and in the 19th century France received preferential treatment for helping the emperor of Annam recover his throne. During the last half of the century, France gradually extended influence over the whole area as it exists today.

After France fell in 1940, Vichy authorized the entry of Japanese troops, and the country became one of the springboards for the Japanese campaign against Singapore. When, in March, 1945, the Japanese seized control of the whole country, Annam and Cambodia declared their independence. After the Japanese surrender, British and Chinese troops occupied Indo-China in the face of a growing nationalist movement, and restored order for the French authorities, who assumed control officially on March 4, 1946.

Until the beginning of World War II, Indo-China was an administrative federation of one colony—Cochin-China; four protectorates—Annam, Tongking, Cambodia and Laos; and a special territory—Kwangchowan (returned to China in 1945). These had various degrees of native rule, but the real administrator of each unit was the French chief resident.

Early in 1945, France announced its

intention of organizing the area into five states constituting a federal union, with the components enjoying limited self-government under a French governor general and the Federation a component part of the French Union. Under this plan, Cambodia received internal autonomy on Jan. 6, 1946, and the kingdom of Laos received similar status on Aug. 26, 1946. Cochinchina became an autonomous republic in June, 1946, and was formally declared a free state within the Indo-Chinese Federation and the French Union on Feb. 4, 1947. Similar proclamations in respect to Cambodia and Laos were issued on Dec 23, 1947.

The Republic of Viêt-Nam—comprising Tongking and the northern part of Annam—had been recognized on March 6, 1946, as a free state within the Indo-Chinese Federation and the French Union. Viêt-Nam leaders, however, demanded a greater measure of autonomy and cession of the rich rice area of Cochinchina as well as southern Annam. The French steadfastly refused to accede to these demands, and fighting broke out again on Dec. 19, 1946.

In the spring and summer of 1947, reinforced French troops won control over all important points in Viêt-Nam. Negotiations with Viêt-Nam leaders, headed by Dr. Ho Chi Minh, a Communist, proved unsuccessful, and the Viêt-Nameese rejected a final appeal made by the French on Sept. 10, 1947, urging them to accept independence within the French Union, with France retaining control of defense and foreign policy. Ho Chi Minh's followers continued to resist in 1948, but on June 5 a new government uniting pro-French groups in Annam, Tongking and Cochinchina was set up under the leadership of Lt. Gen. Nguyen Van Xuan, a former premier of Cochinchina. A treaty signed that day gave the new state independence within the Federation and the French Union.

SOCIAL AND ECONOMIC CONDITIONS. The Annamese, strongly influenced by contact with China, make up 80 percent of the Union's population. Next in importance are the Cambodians, about 3,000,000 strong. There are several other racial groups, some very primitive. The Chinese, concentrated in the cities, are the merchant class and own 90 percent of the rice mills. Most of the population lives on plains near the sea in the states of Tongking (north), Annam (along the east coast) and Cochinchina (in the south).

Rice, grown on five-sixths of the cultivated land, employs and feeds most of the population, and is the leading export and chief source of wealth. Production, centered in Cochinchina, ordinarily averages up to 4,500,000 tons annually, but unsettled conditions reduced output sharply during 1945-48. Other crops include maize, sugar, cotton, tobacco, tea, coffee, groundnuts, sweet potatoes and beans.

The Federation is largely an exporter of raw materials. Its factories are small and process goods for local consumption, or agricultural and forest products for export. Most important are the rice and saw mills. There are also cotton and silk textile factories, sugar refineries, match, cement and paper factories.

Exports in 1948 (excluding Annam and Tongking) were 10,817,111,000 fr. and imports, 4,942,121,000 fr. Chief exports were rubber (70%), rice and pepper. Industrial activity and trade were still subnormal in 1948.

Indo-China has several thousand miles of rivers and canals, including the Mékong River, which is navigable for two-thirds of its course. There are about 2,000 miles of railways, (only 40 percent in operation in 1947). An excellent highway system includes 5,563 miles of improved road, and 11,477 miles of local road. Unreplaced bridges and wartime attrition hampered traffic in 1948.

Mining is most developed in the north. Output in 1944 included: coal, 591,935 tons; tin, 401 tons; tungsten, 110,230 lbs.; and zinc, 1,549 tons. Iron ore, gold, phosphate, manganese, bauxite and lead are mined.

Forests cover 76,570,000 acres of Indo-China. The high mountain ranges of the north supply valuable tropical hardwood, bamboo, lacs and vegetable oil. Laos has rich teak forests. Indo-China's fishing industry provides a major staple food to go with rice. Rubber exports (1946) were 136,376 metric tons, mostly from stockpiles. The industry centers in Cochinchina.

TOPOGRAPHY AND CLIMATE. Extending about a thousand miles from north to south, Indo-China has two great delta regions—the Mékong in the south and the Song Koi in the north. These are separated by the Annam Mountains, and to the west of them are the mountainous continental regions of Laos. The climate is monsoonal, with nearly all of the very heavy rainfall between May and October; April and May are the hottest months (86° to 93.2°). Laos, in the interior, is cooler and drier than most of Indo-China.

OCEANIA

FRENCH PACIFIC SETTLEMENTS—Status: Colony.

Governor: Pierre Maestracci.

Capital: Papeete, on Tahiti (population 1946: 12,428).

Foreign trade (1947): exports, 431,598,000 fr. (colonial); imports, 368,837,000 fr. (colonial). Chief exports: vanilla, phosphate, copra.

Agricultural products: coconuts, sugar, vanilla, tobacco.

Mineral: phosphate (exports 1947: 208,316 metric tons).

The term French Pacific Settlements is applied to the scattered French possessions in the eastern Pacific—Mangareva (Gam-bler), Makatea, Marquesas Islands, Rapa, Rurutu, Rimatara, Society Islands, Tuamotu Archipelago, Tubuai and Raiavavae—which were organized into a single colony in 1903. The appointed governor is assisted by an administrative council. The principal and most populous island—Tahiti, in the Society group (pop. 1941: 23,133)—was claimed as French in 1768. Plebiscites conducted in September, 1940, gave support to the Free French movement of Gen. de Gaulle. The natives are mostly Polynesians. The climate of Tahiti is hot and humid, but not unhealthful. There is no clear division of seasons.

NEW CALEDONIA AND DEPENDENCIES— Status: Colony.

Capital: Nouméa (population 16,000).

Governor: M. Courrière (also French Commissioner General in the Pacific).

Foreign trade (1947): exports 192,815,000 colonial fr.; imports 539,760,000 colonial fr.; (1 U. S. dollar = 50 colonial fr.). Chief exports: nickel, chrome ore, coffee, copra, shells.

Agricultural products: coffee, copra, corn, cotton, manioc, rice, tobacco.

Minerals (1947): nickel (1,500 metric tons, matte), chromite (43,754 tons).

Sea product: mother-of-pearl.

New Caledonia (6,533 sq. mi.), lying about 1,070 miles northeast of Sydney, Australia, was discovered by Captain James Cook in 1774 and annexed by France in 1853. The government, in the hands of an appointed governor and an elective council, also administers the Isle of Pines, the Wallis Archipelago, the Loyalty Islands, the Chesterfield Islands, Walpole, the Huon Islands, Futuna and Alofi, with a total area of 1,121 square miles. The colony—taken over in the summer of 1940 by the Free French after a bloodless revolution—is one of the richest of the Pacific islands in mineral resources, particularly nickel and chrome ore. The natives are Melanesians; about one-third of the population is white and one-fifth Indo-Chinese and Javanese. A French penal colony was established in the 19th century. Average temperature on New Caledonia varies between 65° and 72°.

NEW HEBRIDES—Status: Anglo-French condominium.

Capital: Vila (population 1,200).

Foreign trade (1943): exports, £297,597; imports, £203,693. Chief exports: copra, cacao.

Agricultural products: coconuts, cacao, coffee.

Sea products: trochus and burghaus shell.

The New Hebrides, under joint Anglo-French administration since 1914, lie northeast of New Caledonia. The islands, about 40 in number, joined the Free French movement after a plebiscite in July,

1940. Most of the natives are Melanesians of mixed blood; there were 183 British and 758 French in 1946. The largest island is Espiritu Santo (875 sq. mi.). The French and British high commissioners in the Pacific are represented by resident commissioners.

Germany

Area (est.): 143,243 square miles.

Population (census 1946): 65,910,999 (predominantly German).

Density per square mile: 460.1.

Allied Control Council: Gen. Lucius Clay (U. S. A.); Marshal Vassily D. Sokolovsky (U. S. S. R.); Lt. Gen. Sir Brian H. Robertson (United Kingdom); General Joseph Koenig (France).

Principal cities (census 1946): Berlin, 3,180,383 (capital); Hamburg*, 1,406,158 (chief port); Munich†, 738,018 (Bavarian capital); Cologne*, 489,812 (transportation center); Leipzig†, 608,111 (trading, publishing center); Essen*, 520,592 (steel works); Dresden†, 463,032 (railway center, Elbe port); Frankfurt on Main†, 389,097 (manufacturing).

Monetary unit: German mark.

Language: German.

Religions (1933): Protestant, 62.7%; Roman Catholic, 32.5%; Jewish, 0.7%; others, 4.1%.

*British occupation zone. †U. S. zone. ‡Soviet zone.

HISTORY. Germany, utterly defeated in World War II, was partitioned into four separate zones, and although the Allies in 1945 had declared their intention of treating the country as an economic whole, it was evident three years later that instead of being united again, Germany would remain divided into two parts, one controlled by the western powers and the other by the U.S.S.R. Soviet efforts to oust British, U. S. and French occupation forces from Berlin highlighted the big-power dissension in 1948, as the western powers pushed plans to unite the three western zones.

In the days of Julius Caesar the territory that is now Germany was inhabited by barbarous tribes that came originally perhaps from Central Asia. One of these Germanic tribes, the Franks, attained supremacy in western Europe under Charlemagne, who was crowned Holy Roman Emperor in A. D. 800. By the Treaty of Verdun (843), Charlemagne's lands east of the Rhine were ceded to the German prince Louis. Additional territory acquired by the Treaty of Mersen (870) gave Germany approximately the area she maintained throughout the Middle Ages. For several centuries after Otto the Great was crowned king in 936, the German rulers were also usually heads of the Holy Roman Empire.

Relations between State and Church were changed by the Reformation, which began with Martin Luther's 95 theses, and came to a head in 1547, when Charles V scattered the forces of the Protestant League at Mühlberg. Freedom of worship was ob-

tained by the Peace of Augsburg (1555), but a Counter Reformation took place later, and a dispute over the succession to the Bohemian throne brought on the Thirty Years' War (1618-48) which devastated Germany and left the empire divided into hundreds of small principalities virtually independent of the emperor. Meanwhile, Prussia was developing into a province of considerable strength. Frederick the Great (1740-86) reorganized the Prussian army and defeated Maria Theresa of Austria in a struggle over Silesia. The conflict with revolutionary France hastened the disintegration of the empire, and in 1806 Francis II of Austria laid down the Imperial German crown. After the defeat of Napoleon at Waterloo (1815), the struggle between Austria and Prussia for supremacy in Germany continued, reaching its climax in the defeat of Austria in the Seven Weeks' War (1866) and the formation of the Prussian-dominated North German Confederation (1867).

At the close of the victorious war with France (1870-71), William I, King of Prussia, was crowned Emperor of Germany (Jan. 18, 1871). Under the guidance of the Imperial Chancellor, Prince Bismarck, Germany took a new place in world affairs, at the same time expanding her foreign trade and home industry rapidly. The Triple Alliance was formed with Austria and Italy in 1882. However, upon the accession of William II (1888-1918), Bismarck was dismissed and Russia was alienated. International rivalry was intensified in the early years of the 20th century, culminating in World War I, in which Germany, supporting Austria-Hungary's demands on Serbia, suffered final defeat. By the terms of the Treaty of Versailles (1919) Germany lost about 27,000 square miles of territory, including all her colonies, plus Alsace-Lorraine, northern Schleswig, Eupen-Malmédy, Upper Silesia, and considerable areas in the east. William II had abdicated (Nov. 9, 1918), and a federal republic was organized under the constitution adopted at Weimar in 1919. The constitution was attacked by both the Right and Left; several Communist uprisings took place in the early 1920's, and in 1923 Adolf Hitler's abortive putsch was defeated. Germany's inability to fulfill the heavy reparations demands stipulated by the Treaty of Versailles led to French occupation of the Ruhr (1923-25). National bankruptcy was avoided by adoption of the Dawes Plan (1924) and later, the Young Plan.

The chancellorship of Brüning, leader of the Catholic Center party (1930-32), saw increasing economic and financial distress and the practical cessation of reparations payments. Hitler's rising National Socialist party won a plurality in both the July and November Reichstag elections in 1932, but not until the failure of Franz von

Papen and Kurt von Schleicher to form governments did President Hindenburg name Hitler chancellor (Jan. 30, 1933). With the death of Hindenburg in 1934, Hitler became complete master of Germany, which he rapidly converted into a totalitarian state under the aegis of the Nazi party. All other political parties were banned, and the Jews were subjected to severe persecution. Through his foreign policy, Hitler repudiated the Treaty of Versailles and began full-scale rearmament. In 1935 he withdrew from the League of Nations and in 1936 he reoccupied the Rhineland and signed the anti-Comintern pact with Japan, at the same time strengthening relations with Italy. Austria was annexed in March, 1938. By the Munich agreement (Sept., 1938) he gained the Czech Sudetenland, and in violation of this agreement he completed the dismemberment of Czechoslovakia in March, 1939. But his invasion of Poland on Sept. 1, 1939, precipitated British and French declarations of war.

On May 8, 1945, Germany surrendered unconditionally to Allied and Soviet military commanders, and on June 5 the four-nation Allied Control Council became the *de facto* government of Germany.

At the Berlin (or Potsdam) Conference (July 17-Aug. 2, 1945) President Truman, Stalin and Prime Minister Attlee set forth the principles by which the Allied Control Council was to be guided. They were: Germany's complete disarmament and demilitarization; destruction of its war potential; rigid control of industry; decentralization of the political and economic structure. Pending final determination of territorial questions at the peace conference, the three victors agreed in principle to the ultimate transfer of the city of Königsberg (now Kaliningrad) and its adjacent area to the Soviet Union and to the administration by Poland of former German territories lying generally east of the Oder-Neisse line.

Efforts to unify Germany have thus far been totally unsuccessful. The foreign ministers of the Big Four met twice in 1947—at Moscow and at London—but were unable to agree on any fundamental issue. Meanwhile, on Jan. 1, 1947, the U. S. and Great Britain effected an economic merger of their zones, and on Feb. 9, 1948, they put into effect a plan which gave the two zones greater political responsibility. On May 31, 1948, the U. S., Britain, France and the Benelux countries agreed upon the establishment in 1949 of a German state comprising the three western zones; they also introduced a new German currency. The U.S.S.R. then imposed a rail and road blockade on Berlin to force the western allies out, but the U. S. and Britain organized a vast "air-lift" to fly supplies into Berlin. This new war of nerves reached a climax Sept., 1948, when the western

powers broke off negotiations and brought the dispute before the U. N.

ALLIED CONTROL COUNCIL. By virtue of its unconditional surrender on May 8, 1945, Germany ceased to exist as a sovereign nation. The authority charged with carrying out Allied occupation policy is the Allied Control Council for Germany—a quadripartite body made up of the military governors of the four occupation zones. Each of the members acts as chairman of the meetings in rotation for one month; all of the decisions must be unanimous. A coordinating committee gives preliminary approval of common laws. Following the Berlin dispute in 1948, the U.S.S.R. boycotted all meetings of the Council.

ZONES OF OCCUPATION. For purposes of control, Germany is divided into four national occupation zones, each headed by a military governor, who is assisted by appropriate supervisory and operating staffs.

The U. S. zone (36,869 sq. mi.; pop. 16,682,573) comprises Bavaria and west central Germany. It has a well-balanced economy with both industry and agriculture but normally is poor in basic raw materials and is not self-sufficient in food. Administratively, it is divided into three *Länder*—Bavaria, Greater Hesse and Württemberg-Baden—each with its own constitution and a considerable measure of self-government under a popularly-elected assembly, and a prime minister and cabinet. The three prime ministers together form the *Länderrat*, which performs the functions of mutual consultation, co-ordination and contact with the military government authorities on a zonal level.

The British zone (42,724 sq. mi.; pop. 22,794,655) is made up mostly of former Prussian territory; it stretches across north Germany from Lübeck and the Baltic Sea to the Dutch and Belgian frontiers. It is more highly industrialized than any of the other zones, containing the Ruhr industrial area. In prewar Germany it accounted for 37 percent of the nation's industrial production, 74 percent of the hard coal, 75 percent of the ingot steel and 60 percent of the iron and steel manufactures. Administratively, it consists of three *Länder*—North Rhine-Westphalia, Schleswig-Holstein and Lower Saxony—and the two Hanseatic cities of Hamburg and Bremen. Each *Land* has its own constitution and a popularly-elected government.

The relatively small French zone (16,727 sq. mi.; pop. 5,939,807) includes two triangular districts comprising western Württemberg and southern Baden in the southwest and the Saar and southern Rhineland to the east. Administratively, it comprises the Rhenish Palatinate, French Baden and French Württemberg. The Saar, originally part of the zone, was separated from the rest of Germany in 1946, enlarged slightly (from 743 to 898 sq. mi.) and united eco-

nomically with France on April 1, 1948. It has its own autonomous government under a constitution adopted by the popularly-elected *Landtag* on Nov. 8, 1947. It is second only to the Ruhr in production of hard coal and steel.

The Soviet zone (46,584 sq. mi.; pop. 17,313,581) lies largely between the Elbe and Oder rivers, including most of Brandenburg, Mecklenburg and the industrial Saxon and Thuringian lands. Administratively, it is divided into five *Länder*—Saxony, Mecklenburg, Thuringia, Brandenburg and Saxony-Anhalt. Each *Land* has a popularly-elected government and a prime minister. The Russian zone accounted for 26 percent of prewar Germany's industrial production, ranking first in brown coal, textiles, paper and pulp, and ceramics and glass. It is the only zone which is self-sufficient in food.

The city of Berlin was divided into four national districts, administered by a four-power *Kommandatura* made up of the city's four military governors; in 1948, however, the U.S.S.R. withdrew from the *Kommandatura*. There is also a popularly-elected city council as well as district councils.

BIZONAL MERGER. On Jan. 1, 1947, an Anglo-U. S. agreement took effect providing that the U. S. and British zones should be treated as a single area for all economic purposes and that all resources and imports should be pooled. On Feb. 9, 1948, Anglo-U. S. authorities promulgated a new bizonal charter providing for an economic council of 104 members elected by the *Länder* assemblies, an upper house (*Länderrat*) of two members from each of the *Länder* in the two zones, and a six-man executive council (cabinet) elected by the economic council and the upper house. The new government has control over all economic affairs in the two zones, including taxation, but its legislation is subject to review by the occupying authorities.

In prewar years the combined area accounted for more than half of German industrial production and the great bulk of Germany's hard coal and steel production. It is a major food-deficit area, however, and is also dependent on imports for industrial raw materials other than coal.

In an effort to speed the economic recovery of the bizonal area and of all Germany, the U. S. and British authorities announced on Aug. 29, 1947, a plan to raise the industrial output of the two zones to approximately the 1936 level. Steel production was set at 10,700,000 tons as opposed to an annual 7,500,000 for all Germany set by the Allied Control Council in 1946.

EDUCATION. By the end of World War II practically all formal education was disrupted in Germany, but there was a gradual return to normality. Education still continued to be hampered, however, by

building, textbook and paper shortages and by the difficulty of finding able and politically reliable teachers. In the U. S. zone, six universities (Munich, Erlangen, Würzburg, Heidelberg, Marburg, Frankfurt) with 28,968 students were functioning in Feb., 1947. In addition, there were 12 technical and specialized institutions with 15,920 students; 39 normal schools with 1,245; 10,506 elementary schools with 2,326,424; 467 secondary schools with 221,812; 791 vocational schools with 314,825 students.

AGRICULTURE. In prewar Germany, only about 28 percent of the employed population was engaged in agriculture and forestry, and the country was not self-sufficient in food. The land to the east of the Elbe was mostly divided into large estates (now being broken up), while in the west, in the south and in most parts of central Germany, the land was held mostly by peasant proprietors. About 20 percent of the total area was unfit for cultivation, and of the remaining area only about half was under the plow. The great northern plain is fertile in some areas, but it consists elsewhere of thin, sandy soils fit only to grow potatoes and rye. The rich lands of central Germany, especially Saxony, produce sugar beets containing a high percentage of sugar. Outside of a few grazing districts, mixed farming is done.

Production in the bizonal area was as follows (thousands of metric tons):

	1938	1946*	1947*
Bread grains	5,584	3,096	2,950
Barley	1,719	621	570
Oats	2,708	1,492	1,513
Summer mixed grains	249	205	264
Potatoes	17,492	11,193	12,815
Sugar beets	4,770	3,277	2,645

*Revised estimates.

In Dec., 1947, there were 8,607,000 cattle (1938: 10,255,000), 4,913,000 hogs (average, 1935-39: 11,233,000) and 2,111,000 sheep (1938: 1,874,000).

The three western zones are not self-sustaining in food and were scheduled to receive allocations under the European Recovery Program which went into effect in 1948. Food difficulties stem to a considerable extent from the fact that Poland now controls the area east of the Oder-Neisse, which contained 28 percent of prewar Germany's arable land and produced about 25 percent of its food. Moreover, the population west of the Oder-Neisse is now almost as large as that of all Germany in 1936.

Imports into the bizonal area and Anglo-U.S. sectors of Berlin in 1947 included 991,000 metric tons of flour, 1,811,500 tons of wheat, 752,700 tons of corn and 35,100 tons of sugar. Total grain and flour imports were 3,944,300 tons.

INDUSTRY. Prewar Germany was one of

the world's greatest industrial nations, with more than 41 percent of the employed population engaged in industry. In the prewar years the handicraft system was gradually replaced by large industrial establishments. Iron and steel production was concentrated in the Ruhr and Saarland. The industry suffered a great lack of domestic iron ore, which was largely offset by imports. The electrical industry was concentrated in Berlin, the chemical industry in Bavaria, Rhenish Prussia and Prussian Saxony, and textiles in Saxony.

PREWAR INDUSTRIAL PRODUCTION

Industry	(in tons)	
	1933	1937
Pig iron	5,247,000	15,960,000
Raw steel	7,492,000	19,387,000
Rolling mills	5,558,000	14,179,000
Sulfuric acid	1,206,000	2,050,000
Coal-tar distillations	208,000	464,000
Woolens	138,000	170,000
Cottons	350,000	369,000
Rayon	28,800	57,200
Passenger cars	92,200*	264,600*
Trucks, buses	13,300*	64,404*
Beetroot sugar	1,428,000	2,210,000
Cement	3,820,000	12,605,000
Electricity	25,654,000†	48,969,000‡
Ships	73,723‡	435,606§

*Units. †Million kwh. ‡1934 tonnage. §Tonnage.

PRODUCTION, BIZONAL AREA

	(in thousands of metric tons)		
	1936	1946	1947
Pig iron	12,204	2,080	2,263
Steel ingots	14,232	2,479	2,945
Iron and steel castings	1,998	494	602
Rolling mills	10,300	1,938	2,102
Sulfuric acid	913.8	279.2	406.1
Automobiles	146,640*	9,937*	9,287*
Cotton yarn	208.7	N.A.	62.1
Wool yarn	46.6	N.A.	21.4
Cement	7,956	2,256	2,568

*Units. N.A.—Not available.

REPARATIONS. By the Potsdam declaration and subsequent enactments, the Allies specified that Germany was to pay reparations, not in long-term payments reckoned in cash as after World War I, but in the delivery of gold, assets held abroad, and—most important—all machinery and equipment of plants making arms and munitions, ocean shipping, synthetic ammonia, gasoline, minerals, aircraft, etc., all to be removed from Germany by 1951.

TRADE. Prewar Germany was one of the world's great trading nations. By 1948, efforts of occupation authorities to promote foreign trade were beginning to bear fruit. In 1947, exports of goods and services from the U. S.-British zone were valued at \$223,923,000. Of this amount, \$37,204,000 represented manufactured goods, the balance being derived from the sale of coal and

timber, and port charges and other services. Coal alone accounted for 55 percent of the total. The principal customers were Britain, Austria, France, the Netherlands and Belgium. Imports were over \$700,000,000—food, fertilizer and petroleum.

COMMUNICATIONS. German railway trackage and rolling stock, as well as the canal system, were largely destroyed during World War II, and the lack of adequate transportation seriously hindered German economic recovery. Less than 30 percent of the prewar merchant marine (1939: 4,482,682 gross tons) was still afloat, and about 1,200,000 tons of this were distributed among the United Nations in the spring of 1946, leaving only a small merchant fleet of about 420,000 tons deadweight for essential coastal shipping and fishing.

Navigable waterways (1939: 7,930 miles) carried 153,219,700 tons of freight in 1938, of which the Rhine accounted for about half. The German river fleet (1938) comprised 17,757 vessels of 6,468,568 tons. Shipping on the Rhine is now controlled by the Central Commission of the Rhine—an international body composed provisionally of U. S., British, French, Swiss, Dutch and Belgian representatives—which was reconvened in October, 1945.

FINANCE. In June, 1948, the western powers replaced the practically worthless Reichsmark with a new Deutsche mark at the rate of 10 to 1, in an effort to cut currency circulation and stabilize the fiscal system. The new marks are not valid in the Soviet zone, but Soviet authorities countered with a new currency of their own.

Recent zonal budgets have been as follows: U. S. zone (actual 1946-47): revenue Rm.6,093,000,000; expenditure Rm.4,299,000,000. British zone (actual 1946-47): Rm.7,617,200,000; expenditure Rm.5,416,700,000; emergency revenue Rm.528,300,000; emergency expenditure Rm.2,348,300,000. Soviet zone (est. 1947-48): revenue Rm.8,500,000,000; expenditure Rm.8,300,000,000. French zone (ordinary 1946-47): revenue Rm.1,664,344,621; expenditure Rm.970,217,600; expenditure (extraordinary 1946-47): Rm.1,186,127,420.

NATURAL RESOURCES. Aside from rich deposits of coal and potash, Germany's mineral wealth is not considerable. The Ruhr, Krefeld and Aachen districts of western Germany (mostly in the British zone) constitute one of the world's greatest coal mining regions, with prewar reserves estimated at 65,520,000,000 tons. Production in this area (about 78 percent of total prewar production) is handicapped by the prevalence of thin seams, but distribution is favored by easily accessible natural waterways and efficient canals. Most of the Silesian reserves, estimated at 5,240,000,000 tons, are in the area under *de facto* Polish administration. Potash reserves, estimated at 15,300,000,000 tons, are located in the

Harz, Saale and Halberstadt districts and in Saxony.

In 1939 Germany produced 220,460,000 short tons of coal and 253,529,000 tons of lignite, and in 1938, 12,057,674 tons of iron ore and 18,124,316 tons of potash. Production in the U. S.-British bizonal area in 1936, 1946 and 1947 was as follows (in thousands of metric tons):

	1936	1946	1947
Coal	116,964	53,946	71,125
Lignite	56,832	50,894	58,801
Iron ore	6,247	3,327	3,582
Crude potash	4,344	2,615	3,296

Slightly over a quarter (27.5%) of prewar Germany was covered by forests, which yielded timber (1935: 1,193,462,652 cu. ft.) as well as material for paper, wood-fiber, cellulose and other products. Despite a highly advanced system of reforestation, Germany's prewar wood supply was insufficient for her needs.

Fisheries are an essential part of the German economy. The catch (1937) amounted to 740,205 tons (excluding plaice, whales and whale oil) valued at \$41,256,139. In 1946, fishing fleets operating under the supervision of the joint Anglo-American Fishery Control Board landed 85,000 metric tons of fish at the Bremen enclave.

TOPOGRAPHY. Germany lies in north central Europe, bounded on the west by the Netherlands, Belgium, Luxemburg and France; on the south by Switzerland, Austria and Czechoslovakia; on the east by Poland; and on the north by the Baltic Sea, Denmark and the North Sea. The northern plain, the central hill country and the southern mountain district constitute the main physical divisions. The Bavarian plateau in the southwest averages 1,600 feet above sea level, but to the west, in the Black Forest, it reaches 9,721 feet in the Zugspitze, the highest point in Germany. Other mountain ranges are the Böhmer Wald, the Erzgebirge and the Riesengebirge on the Czechoslovak border, and the Harz in central Germany.

There are several important navigable rivers. In the south the Danube, rising in the Black Forest, flows east across Bavaria into Austria. The other important rivers flow north. The Rhine, which rises in Switzerland and flows across the Netherlands in two channels to the North Sea, is navigable by smaller ocean-going vessels as far as Cologne. The Rhine and the Elbe, which also empties into the North Sea, and the Oder, emptying into the Baltic, are all navigable within Germany for ships of 400 tons. The Weser, flowing into the North Sea, and the Main and Mosel (Moselle), both tributaries of the Rhine, are also important.

CLIMATE. The climate of Germany is intermediate between the oceanic climate of

western Europe and the continental climate farther east. The generally equable climate of the north grades into pronounced extremes toward the eastern border, where the winters are long and cold and the summers short and hot. The average summer temperature in Germany is 60° to 62°. The sheltered mountain valleys of the south enjoy a more temperate climate, especially the valley of the Rhine above Mainz. Rainfall is heaviest in the south and west (over 30 inches) but all of Germany is well watered.

Greece (Kingdom)

(Hellas)

Area: 51,304 square miles.*

Population (est. 1940)*: 7,458,000 (excluding Dodecanese: Greek, 92.8%; Turkish, 3.8%; Macedonian, 1.3%; Spanish, 1%; others, 1.1%).

Density per square mile: 145.3.

Sovereign: King Paul I.

Premier: Themistocles Sophoulis.

Principal cities (est. 1940): Athens (Athenai), 392,781 (capital); Piraeus (Pelraievs), 284,079 (port of Athens); Salonika (Thessalonike), 236,524 (seaport); Patras (Patrai), 61,278 (seaport); Kavalla, 49,980 (seaport; tobacco).

Monetary unit: Drachma.

Languages: Greek, Turkish.

Religions: Greek Orthodox, 96%; Mohammedan, 2%; Jewish, 1.1%; others, .9%.

*Including Dodecanese.

HISTORY. Rugged, mountainous Greece—ancient cradle of one of the world's great civilizations—suffered cruelly in World War II and emerged as a land torn by civil war between its right and left political elements, while complete economic chaos reigned. World attention was focused on the little country (about the size of North Carolina) in 1946-48 as it became a center of political struggle between the Soviet Union and the bloc of western nations which opposed further Russian expansion.

Ancient Greece, with a recorded history going back to 776 B.C., reached the peak of its glory in the 5th century B.C., and by the middle of the 2nd century B.C., it had declined to the status of a Roman province. It remained within the Eastern Roman Empire until Constantinople fell to the Crusaders in 1204. In 1453, the Turks took Constantinople, and by 1460 Greece was a Turkish province. The insurrection made famous by the poet Lord Byron broke out in 1821, and in 1827 Greece was set up an independent nation, with sovereignty guaranteed by Britain, France and Russia. Prince Otto of Bavaria was recognized as king five years later, but he was ousted by a revolution in 1862. Prince William of Denmark, as George I, succeeded him.

Up to this time Greece consisted only of the Peloponnesus and the lower part of

the peninsula north of the Gulf of Corinth. Britain gave Greece the Ionian Islands in 1864, and Thessaly was added in 1881. Greek success in the Balkan Wars of 1912-13 brought the addition of Macedonia, Epirus, Crete and many Aegean Islands. In World War I, Greece kept a precarious neutrality until June, 1917, when King Constantine (who had succeeded George I in 1913) was forced to abdicate in favor of his second son, Alexander. Greece then entered the war on the Allied side. By the Treaty of Sèvres, Greece was awarded Thrace and part of Asia Minor. Turkey, however, drove the Greeks out of Smyrna in 1922.

Greece was proclaimed a republic on March 25, 1924, and there followed strife and dissension between Royalists and Republicans, although fair order was maintained during the premierships of Eleutherios Venizelos from 1928 to 1933.

In 1935, the people voted for the return of King George II, who had abdicated in 1924 after a short rule. In April, 1936, General John Metaxas became premier and by August he had abolished parliament and set up a dictatorship.

Greece was invaded by the Italians in 1940. By April, 1941, the Greeks not only had driven the Italians out of Greece but were well into Albania. The Germans came to Mussolini's rescue, invaded Greece from Bulgaria, and took Athens on April 27, 1941. Starvation and harsh persecution of the Greeks were common during the Axis occupation. After liberation, Greece became a land of conflict with armed bands of Royalists and Communists terrorizing the nation. The government, which had fled the country, returned in Oct., 1944, following Greece's liberation by British forces. In less than two months, all the EAM (National Liberation Front) ministers, decided leftists, resigned from the government, setting up a crisis which brought on months of fighting between British troops and leftist resistance forces.

Peace was not restored until Feb. 12, 1945. Three short-lived premierships followed until the elections of March 31, 1946, gave a majority of Assembly seats to the Populist (Royalist) Party. Its leader Konstantinos Tsaldaris, became premier on April 18, 1946. However, all the leftist groups boycotted the March elections, and the depredations of armed bands of Communists and Royalists continued.

The country approved the return of George II by a large majority in a plebiscite held Sept. 1, 1946. The king returned on Sept. 28 but died April 1, 1947, and was succeeded by his brother Paul I.

An important recent development in troubled Greece has been the extension of U. S. financial and technical assistance supervised by a U. S. mission. In May, 1947

the U. S. appropriated \$300,000,000 for Greek aid, and by mid-1948 the influx of U. S. supplies had enabled Greek forces to make good progress against the Communist guerrillas who on Dec. 24, 1947, had proclaimed the formation of a "provisional democratic government of free Greece" with Gen. Markos Vafeiades as premier. The commission of inquiry appointed by the U. N. at the behest of Greece reported on June 25, 1947, that Yugoslavia, Albania and Bulgaria were aiding the rebels.

U. S. aid has also had a stabilizing effect on perennially unstable Greek politics. Tsaldaris' right-wing cabinet yielded in Jan., 1947, to a coalition headed by Demetrios Maximos. On Sept. 7, with U. S. approval, Themistocles Sophoulis, veteran Liberal leader, took over at the head of a Liberal-Populist cabinet with Tsaldaris as deputy premier.

GOVERNMENT AND DEFENSE. Greece is a constitutional hereditary monarchy. Nominal executive power is vested in the king, but the government is administered by a Council of Ministers, headed by the premier, which must enjoy the Assembly's confidence. Under the terms of the 1947 U. S. loan, U. S. officials are advising various departments of the government, which is noted for its inefficiency.

The sovereign, Paul I, was born Dec. 14, 1901, and was married Jan. 9, 1938, to Princess Frederika Louise of Brunswick. They have one son, Prince Constantine, born June 2, 1940 (the heir apparent), and two daughters.

Military service is compulsory. U. S. aid in 1948 made possible an increase in army strength from 120,000 to 132,000; the National Guard was also increased from 30,000 to 50,000. Greek forces were being advised by a U. S. military mission, and U. S. officers were attached in an advisory capacity to operational units. Britain also has military, gendarme and naval missions and a garrison of about 5,000 troops. The Royal Hellenic Navy in 1948 had 10 destroyers, 6 submarines and numerous smaller craft; it received 11 minesweepers and 6 gunboats from the U. S. early in 1948 and was scheduled to receive a 7,000-ton Italian cruiser.

SOCIAL AND ECONOMIC CONDITIONS. Education is compulsory for all children between the ages of 7 and 12. In 1938 (latest statistics available in 1947) Greece had 743 kindergartens with 38,338 pupils, 8,339 primary schools with 985,018 pupils and 407 high schools with 92,687 students. There are three universities (two at Athens and one at Salonika).

The predominant religion is Greek Orthodox, the religion of the state, but all faiths are tolerated.

About three-quarters of the population engages in agricultural pursuits, although only one-fifth of the land is arable. Agri-

cultural production in 1948 was nearer to prewar levels than was any other phase of the economy, but the country was still dependent on food imports. The greater part of the cultivated area is devoted to cereals: wheat (1946-47: 635,000 short tons), barley and corn. There are also olive trees, vines, tobacco and currants. Olive oil production in 1946-47 was 160,000 short tons. The principal fruits are oranges, lemons, figs, mandarins, apples, pears and grapes. Wool production in 1946-47 was 9,000 short tons. In Dec., 1946, there were approximately 6,000,000 sheep, 600,000 cattle and 400,000 hogs.

Development of large-scale Greek manufacturing is blocked by lack of coal resources and of capital. The most valuable products are textiles, chemicals and food items. Among other processed or manufactured products are olive oil, wine, spirits, flour, carpets, leather, cigarettes and building materials. Postwar industrial rehabilitation has proceeded slowly, hampered by war damage and subsequent internal strife.

Exports in 1939 were valued at \$75,007,000. Imports were valued at \$100,081,000. Principal exports were: horticultural products, especially tobacco and currants, 70.8 percent; oils and waxes, especially olive oil, 9 percent; mineral products, 4.8 percent; and wine, 3 percent. Trade statistics for 1946, reflecting abnormal conditions, showed exports of 201,174,000,000 drachmai and imports of 435,444,000,000 drachmai.

The large prewar merchant marine, comprising 589 ships of 1,812,723 tons and 710 sailing vessels of 55,417 tons, played a vital part in the national economy. World War II shipping losses amounted to 1,178,000 tons; the merchant marine on June 1, 1948, totaled 287 steamers of 1,284,121 gross tons, and 408 sailing ships. The chief ports are Piraeus (for Athens) and Salonika.

Railway mileage in 1945 totaled 1,670. Highways totaled 8,450 miles. Wartime damage was severe. The railways, lost more than 80 percent of their rolling stock and 90 percent of their locomotives. Highways were largely reduced to a series of potholes.

Postwar inflation has been severe and is still unchecked. In April, 1948, the drachma was selling at the rate of 5,020 to the U. S. dollar, as against 125 in 1939. Even at the former rate it was overvalued, and under a certificate system introduced in Oct., 1947, the legal rate for exports and imports was 9,227 to the dollar in April, 1948.

The 1946-47 budget placed revenue at 1,401,000,000,000 drachmai as against expenditures of 1,577,000,000,000 drachmai. Budget estimates for the fiscal year Apr. 1, 1947-June 30, 1948 placed revenue at 2,753,000,000,000 drachmai and expenditures at 2,960,000,000,000 drachmai.

Greek minerals are varied but are exploited only moderately. Principal ones are

lignite, iron ore, iron pyrites, magnesite, chromite, lead, bauxite, molybdenum, emery, marine salt and the country's famous marble. A fifth of the country is forested, largely with pine, fir and oak. Resin and turpentine are main forest products. The principal sea product is sponges.

TOPOGRAPHY AND CLIMATE. North central Greece, Epirus and western Macedonia all are mountainous. The main chain of the Pindus Mountains rises to 9,000 feet in places, separating Epirus from the plains of Thessaly. Greek Thrace is mostly a lowland region separated from European Turkey by the lower Maritsa River. The area of the mainland is 41,328 square miles. Among the many islands are the Ionian group off the west coast, 742 square miles in area; the Cyclades group to the southeast, 996 square miles; other islands in the eastern Aegean, including Lesbos, Samos and Khios, 1,486 square miles; and Crete, the fourth largest Mediterranean island, 3,199 square miles. Crete, largely mountainous, is about 160 miles in length, with a width varying from 7 to 35 miles.

The Dodecanese (area 1,035 sq. mi.), a group of 13 islands in the Aegean Sea near the coast of Asia Minor were ceded to Greece by the 1947 Italian peace treaty and formally transferred on March 7, 1948.

The Greek climate is varied but generally similar to that of other Mediterranean countries. The maritime regions have a temperate climate, with short winters and little snow or frost. In the uplands the winters are long and severe. Precipitation is heaviest in the mountains. Mean temperature at Athens is about 63°, with maximum of 99° in July and minimum of 31.5° in January. The summer heat is moderated by sea breezes and cool northerly winds from the mountains.

Guatemala (Republic)

(República de Guatemala)

Area: 45,452 square miles.

Population (est. 1947): 3,643,000 (Indian, 60%; white, 5%; mixed and other, 35%).

Density per square mile: 80.1.

President: Juan José Arévalo.

Principal cities (census 1940): Guatemala City, 163,826; est. 1946, 225,000 (capital); Quetzaltenango, 33,538 (coffee, sugar); Puerto Barrios, 15,784 (chief Atlantic port); Zacapa, 14,443 (coffee, livestock).

Monetary unit: Quetzal.

Language: Spanish.

Religion: Roman Catholic.

HISTORY AND GOVERNMENT. Once the site of the ancient Mayan civilization, Guatemala was conquered by Spain in 1524 and for the next 300 years was the major

center of Spanish government in Central America. Guatemala was one of the founders of the Central American Union in 1823, and in 1839 set itself up as a republic. From 1898 to 1920 the dictator, Manuel Estrada Cabrera, ran the country, and from 1931 to 1944, General Jorge Ubico Castañeda was the "strong man." In July, 1944, the National Assembly elected General Federico Ponce president, but he was overthrown in October, and in December Dr. Juan José Arévalo was elected as the head of a leftist regime which has continued to press its reform program in the face of conservative resistance. He took office on March 15, 1945.

The eastern border is the object of dispute with Great Britain; in Feb., 1948, two British cruisers were dispatched to British Honduras to meet threatened attacks by Guatemala.

The Constitution of 1945 provides that a president shall be elected every six years by direct popular vote and cannot succeed himself immediately. Legislative power is vested in a unicameral National Assembly whose 63 members are popularly elected for four-year terms, half the members being elected every two years. Guatemala has an army of 20,000 and a small air force.

SOCIAL AND ECONOMIC CONDITIONS. Education, advanced under Ubico, is free and compulsory. In 1943, a total of 152,274 pupils attended 2,784 primary schools. In 1942, twenty-eight secondary schools had an enrollment of 5,600. The university of Guatemala is located in Guatemala City. The government began a literacy campaign in 1946, providing 500 adult centers to augment the existing school system.

Most of the ruling class is drawn from the 5 percent of the population that is white. Spanish is the official language, but at least eighteen Indian dialects are spoken. The Indians are the chief labor supply.

Agriculture engages 90 percent of Guatemalans. Coffee accounts for a fifth of the cultivated land and about 60 percent of the exports, followed in 1946 by bananas, chicle, essential oils, timber and honey. Exports in 1947 came to 52,000,000 quetzales (1946: \$36,679,134) and imports, 57,300,000 quetzales (1946: \$36,203,577), chiefly textiles, railway equipment, motor vehicles, flour, gasoline and oil. In 1947 the U. S. took 86% of exports and supplied 75% of imports. Of the exports 61% was coffee, 22% bananas.

Guatemalan manufacturing is small and local. The country has 600 miles of public railway connecting the coasts, 280 miles of private railway and 4,045 miles of highways. Puerto Barrios, on the Atlantic side, is the main port of entry, and is linked by rail to the capital.

The 1948-49 budget balanced at \$44,646,000, and the public debt on Jan. 1, 1947

was \$2,186,735. British investments on Dec. 31, 1947, amounted to £10,030,968.

Guatemala has reserves of gold, silver, lead, tin, copper, mercury, coal, antimony, salt, chromite and sulfur, but many of these minerals exist in insufficient quantity to justify exploitation, and only lead and chromite are produced commercially.

The country's vast forests, mostly in the Petén region, yield chicle for chewing gum, a small amount of rubber, and dyewoods and cabinet woods, such as cedar, mahogany and logwood. About 15,000,000 acres are in hardwoods and 3,000,000 acres in softwoods. 1946 exports of chicle were 1,984 tons, mahogany 2,250,000 bd. ft., and ordinary timber, mostly pine, 3,650,000 bd. ft.

TOPOGRAPHY AND CLIMATE. Most of Guatemala is mountainous, with many volcanic peaks, including Tajumulco, 13,814 feet high and the loftiest in Central America. The northern part is the great plain of Petén, largely uncultivated, sparsely populated, and geographically part of the Yucatán peninsula. The narrow Pacific slope, well watered and fertile, is the most densely populated and the most productive part of Guatemala. The climate is hot and humid on the coasts, with heavy rainfall, but is temperate in the highlands. The rainy season lasts from May to October in the interior, and often until December on the coast. January is the coldest month and May the warmest.

Haiti (Republic)

(République d'Haiti)

Area: 10,748 square miles.

Population (est. 1944): 3,000,000 (Negro, 90%; mulatto, 10%).

Density per square mile: 279.1.

President: Dumarsais Estimé.

Principal cities (est.): Port-au-Prince, 125,000 (capital, chief port); Gonaïves, 20,000 (farming district); Cap Haïtien, 15,000 (seaport); Aux Cayes, 15,000 (seaport, coffee).

Monetary unit: Gourde.

Language: French.

Religion: Roman Catholic.

HISTORY. Haiti, the only Negro republic in the Western hemisphere, occupies the western third of the island of Hispaniola, which was discovered by Columbus in 1492. Its political past is stormy, and today it is the smallest and most thickly populated of the American republics, a nation beset by illiteracy and poverty.

After successive Spanish and French domination, Haiti became a kingdom in 1801 under Toussaint L'Ouverture, a Negro leader. He was later captured by the French and died in prison, but the kingdom lasted and declared its independence in 1804, be-

coming a republic in 1820. In 1822 Haiti took over all of Hispaniola, and carried on until 1843, when the eastern two-thirds of the island revolted and established the Dominican Republic. Today the island is the only one in the world containing two sovereign nations.

Decades filled with revolution, corruption and disease came to a bloody climax in 1911-15, when Haiti had seven presidents in four years. After the assassination of the last one, United States Marines moved in. By a 1916 treaty, the United States agreed to help administer the country until the Haitians proved themselves capable of orderly self-government. The last Marines left in 1934, but a U. S. fiscal expert continued to supervise customs until 1941. On January 11, 1946, President Elie Lescot was driven from the country by revolution, and a three-man military junta took over until the election of President Estimé on Aug. 16.

GOVERNMENT. Normally the president is elected for six years by two-thirds vote of the National Assembly. That body consists of a 37-member chamber of deputies, elected for four years by popular vote; and a 21-member senate elected for six years. The Garde d'Haiti, about 4,500 strong, serves as army and police force.

SOCIAL AND ECONOMIC CONDITIONS. Most Haitians are descended from African slaves. Their illiteracy rate is estimated at 92 percent. Although 1946 figures showed enrollment of 91,000 in primary and secondary schools, actual attendance is much lower. A campaign against illiteracy under UNESCO auspices was initiated in 1947. The mulattoes—lightened by the blood of the early French settlers—dominate the political and social life of the nation. Many of them are Paris-educated. While the ruling classes speak pure French, most of the people speak the patois of Creole French, and many of them still practice the strange folk religion of voodoo.

Haiti is predominantly agricultural. Coffee, which makes up more than 30 percent of Haitian exports, is the principal crop, followed by sisal, sugar cane, cotton, bananas and cacao. Coffee exports in 1945-46 were about 27,000 short tons. Manufacturing is almost entirely for local consumption, but there are several sisal factories and sugar refineries.

Exports (including re-exports) for the year ending September 30, 1947, totaled \$31,498,000, and imports \$27,230,000. The United States took 59 percent of the exports and supplied 87 percent of the imports. In addition to coffee, exports include bananas, cacao, logwood, cotton, sisal, raw sugar, molasses and rice.

In 1947 Haiti had about 1,800 miles of improved road and 180 miles of railway. International air service is provided by PAA and KLM.

More than 75 percent of Haitian revenue is derived from customs paid in American currency on exports and imports. The 1947-48 budget was balanced at \$10,350,400. There is usually a budget surplus. The public debt on Sept. 30, 1947, was \$9,996,000, about 80 percent internal and the remainder an obligation to the U. S. Export-Import Bank.

Minerals, relatively unexploited, include gold, silver, iron, copper, antimony, tin, coal, nickel and gypsum. In 1943, a sizable bauxite deposit was found and signed over for U. S. development. Inland Haiti has forests of mahogany, pine, lignum vitae and other commercial woods. Output of the fisheries is insufficient to supply local needs.

TOPOGRAPHY AND CLIMATE. Haiti, about the size of Maryland, is two-thirds mountainous, with the rest marked by great valleys, extensive plateaus and small plains. The most densely populated and productive region is the Cul de Sac plain, near Port-au-Prince. Rivers are swift and generally not navigable. The climate is hot on the coast, temperate in the mountains, with hurricanes frequent in the May-to-October rainy season. Port-au-Prince has a mean annual temperature of 81°.

Honduras (Republic)

(República de Honduras)

Area: 59,145 square miles.

Population (census 1945): 1,201,310 (mestizo, 86%; Indian, 10%; Negro, 2%; white, 2%).

Density per square mile: 20.3.

President: Dr. Tiburcio Carías Andino.

Principal cities (census 1945): Tegucigalpa, 55,715 (capital); San Pedro Sula, 22,116 (bananas, sugar); La Ceiba, 12,185 (seaport, bananas); Tela, 8,969 (seaport, bananas).

Monetary unit: Lempira.

Language: Spanish.

Religion: Roman Catholic.

HISTORY AND GOVERNMENT. Columbus discovered Honduras on his last voyage in 1502; it was a Spanish colony and part of Guatemala until 1821, the year of the general Central American revolt against Spain. Honduras declared its independence in 1838, and has been troubled by revolution and war ever since. American Marines intervened in 1903 and 1923. In 1931, 1932 and 1937, major revolutions were crushed by force. The Nicaraguan-Honduras boundary dispute of 1937 almost caused war, and in April, 1945, the country was invaded from Guatemala by a group of Honduran exiles, who were suppressed.

Legislative power is held by the unicameral Congress of Deputies, whose 45 members are popularly elected for six years. The president also is elected for six years and is not supposed to succeed him-

self, but Congress has twice extended the term of Dr. Carías, the last time until 1949.

Military service is compulsory. The army is estimated to be slightly under the 2,500 strength agreed upon by the Central American states.

SOCIAL AND ECONOMIC CONDITIONS. Education is free and supposedly compulsory, but less than 25 percent of the children go to school. The government is trying to reduce illiteracy, estimated at 82 percent. In 1946 there were 60,574 primary pupils and 5,226 secondary pupils enrolled. The National University at Tegucigalpa had 433 students.

Most of the population is of mixed Spanish-Indian blood, but the ruling class is of nearly pure Spanish descent. Except among isolated Indian tribes, Spanish is the common language. Most of the Negroes are British subjects imported for plantation work.

Honduran economy depends upon bananas, which usually account for more than 50 percent of the nation's exports. The biggest plantations are along the northern coast. Exports in 1946 totaled 14,183,557 stems, more than 90 percent produced by two U. S. companies. Other crops are corn, coffee, rice, henequen, tobacco and coconuts. Honduras also is an important source of sarsaparilla. Cattle raising and dairy farming flourish on rich pasture lands. Manufacturing is small and local.

In 1946-47 exports were 34,020,000 lempiras and imports 58,860,000 lempiras. 63% of exports went to U. S.; 14% to Canada. The U. S. supplied 77% of imports. Exports—47% bananas, 10% coconuts and 9% silver; others included coffee, livestock and coconuts.

Honduras' railroads—920 miles of track—are all owned by fruit companies and used to transport bananas; they are confined to the northern coastal area. Since the country is mountainous and rugged, aviation has become an important means of travel. Despite its small size, the country has 61 landing fields. Highway mileage is estimated at 1,200 miles. Lake Yojoa and several rivers are navigable for small vessels.

The budget for 1946-47 balanced at \$7,241,246. On June 30, 1946 the external debt totaled \$1,361,937 and the internal debt \$5,333,167. British investments on Dec. 31, 1947, totaled \$889,820.

In 1946 Honduras produced 12,081 troy ounces of gold and 2,693,166 troy ounces of silver; these are the two most important mineral products. Copper and iron exist in paying quantity but are undeveloped. The country is noted for rich forest resources particularly the tropical hardwoods. In 1946, 1,417,393 bd. ft. of mahogany lumber and logs and several million bd. ft. of pine were exported.

TOPOGRAPHY AND CLIMATE. Honduras, in the north central part of Central America, has a 400-mile Caribbean coastline and a 40-mile Pacific frontage. Generally mountainous, it has fertile plateaus and river valleys and narrow coastal plains. The Bahía (Bay) Islands, off the north coast, produce large quantities of coconuts. Of numerous rivers on the northern slope of Honduras, the Ulua drains a third of the nation and is navigable for most of its course. The climate is oppressive in the coastal lowlands, pleasant in the interior highlands. At Tegucigalpa, maximum temperature is about 90° (in May), and minimum 50° (December).

Hungary (Republic)

Area: 35,911 square miles.

Population (est. 1947): 9,333,000 (Magyar, German, Slovak).

Density per square mile: 259.8.

President: Arpad Szakasits.

Prime Minister: Lajos Dinnyes.

Principal cities (est. 1946): Budapest, 1,026,883 (capital, Danube port); (census 1939): Szeged, 141,254 (textiles, wheat); Debrecen, 128,442 (livestock); Kecskemét, 83,837 (horticulture); Pécs, 73,887 (farming).

Monetary unit: Forint (replacing Pengő).

Languages: Hungarian, German.

Religions (est.): Roman Catholic, 64.9%; Greek Catholic, 2.3%; Helvetic Evangelical, 20.9%; Augsburg Evangelical, 6.1%; Jewish, 5.1%; others, .7%.

HISTORY AND GOVERNMENT. Fascist-minded militarists and greed for more territory lined up Hungary with Germany and Italy just before World War II. The fruits of this alliance and the resultant defeat of Hungary were a smashed economy, wild inflation, poverty, Soviet occupation and a reparations debt of \$300,000,000. Politically the Soviet-supported Communist minority was thoroughly defeated by the conservative Small Landholders in the 1945 elections, yet it succeeded in taking over most of the key positions in the government. Controlling the police, the Communists waged a war of nerves against the Small Landholders, eventually forcing the resignation of Prime Minister Ferenç Nagy on May 30, 1947, and securing the appointment of a left-wing Small Landholder, Lajos Dinnyes, in his place. Then, shortly before the 1947 peace treaty became effective, a national election was carried out on Aug. 31, with the Communists replacing the Small Landholders as the dominant party. On Feb. 18, 1948, a 20-year mutual defense pact was concluded with the U.S.S.R. President Tildy resigned July 30, 1948, after a relative had been charged with treason, and on Aug. 3 leftist vice-premier Arpad Szakasits was elected.

Two thousand years ago Hungary was part of the Roman provinces of Pannonia and Dacia on the empire's borders. In A.D. 894 it was invaded by the Magyars, who founded a kingdom. Christianity was accepted during the reign of Stephen I (St. Stephen) from 997 to 1083. The peak of Hungary's great period of medieval power came in 1342-82 under King Louis the Great (Louis I) of Anjou, whose dominions touched the Baltic, Black and Mediterranean Seas. When the Turks smashed a Hungarian army in 1526, western and northern Hungary accepted Hapsburg rule to escape Turkish occupation. Transylvania became independent under Hungarian princes. Intermittent war with the Turks was waged thereafter for some years.

After the suppression of the 1848 revolt against Hapsburg rule led by Louis Kossuth, the dual monarchy of Austria-Hungary was set up in 1867.

The dual monarchy was defeated with the other Central Powers in World War I, and the new Hungary underwent hard times. First there was a short-lived Socialist Republic in 1918. The chaotic Communist rule of 1919 under Béla Kun ended with the Rumanians occupying Budapest on Aug. 4, 1919. When the Rumanians left, Admiral Nicholas Horthy entered the capital with a national army. The Treaty of Trianon of June 4, 1920, cost Hungary 75 percent of its land and more than 50 percent of its population. Meanwhile, the National Assembly had restored the legal continuity of the old monarchy, and on March 1, 1920, Horthy was elected regent. Former King Charles made two unsuccessful efforts to return to the throne in 1921.

After 1920 Hungary was, in effect, ruled by its great land owners, but the turn came in 1932 with the accession of General Julius de Gömbös, a pro-Fascist, as prime minister. Under Gömbös and his successors, Kaloman Daranyi in 1936 and Béla Imrédy in 1938, cooperation with Italy and Germany was Hungary's guiding principle. Hungary signed the anti-Comintern pact on Jan. 13, 1939, and the Three Power Pact of Germany, Italy and Japan on Nov. 20, 1940. As inducement and reward for these actions, Hungary got part of Slovakia and all of Ruthenia from Czechoslovakia in 1938 and 1939; northern Transylvania from Rumania in 1940.

Following the German invasion of Russia on June 22, 1941, Hungary joined the attack against the U. S. S. R. But the war was not popular and Hungarian troops were almost entirely withdrawn from the eastern front by May, 1943. The government of Nicholas von Kállay was overthrown March 19, 1944, and German occupation troops set up a puppet government after Admiral Horthy's appeal for an armistice with advancing Soviet troops.

had resulted in his overthrow on Oct. 16. The German regime soon fled the capital, however, and on Dec. 23 a provisional government was formed in Soviet-occupied eastern Hungary. On Jan. 20, 1945, it signed an armistice in Moscow.

On Feb. 1, 1946, the National Assembly approved a constitutional law abolishing the 1,000-year-old monarchy and establishing a republic. Up to that time, Admiral Horthy had been regent for a non-existent king. Prime Minister Tildy, a Small Landholder, was immediately elected president for a four-year term, and Ferenc Nagy replaced him as prime minister.

The National Assembly had the following makeup after the 1947 elections: Communists, 100(c); Small Landholders, 68(c); Socialists, 67(c); People's Democrats, 60; Hungarian Independence, 49; Peasants, 36(c); others, 31. (C refers to the Government coalition.)

PEACE TREATY OF 1947. The final peace treaty which took effect Sept. 15, 1947, fixed Hungary's frontiers as they were on Feb. 1, 1938, except that a small bridgehead on the south bank of the Danube opposite Bratislava was ceded to Czechoslovakia. Hungary was to pay reparations of \$300,000,000 over a period of 8 years, \$200,000,000 to the Soviet Union and \$100,000,000 to Yugoslavia and Czechoslovakia. The treaty also provided freedom of navigation on the Danube for nationals of all states.

The strength of Hungarian armed forces was fixed by the treaty as follows: army, 65,000, including frontier, anti-aircraft artillery and river flotilla personnel; air force, 90 planes with a personnel of 5,000. Soviet troops are permitted to maintain communication through Hungary to Austria until a treaty with Austria takes effect. Soviet influence in the army is strong.

SOCIAL AND ECONOMIC CONDITIONS. Education is compulsory for children between 6 and 12, and for three more years they attend continuation schools or courses. In addition to these continuation schools and a relatively large number of special schools, Hungary in 1939 had 8,103 elementary schools with 1,104,916 students. In the cities there were 418 primary schools with 105,466 students. High schools of different kinds numbered 263 with 79,435 students. There are six universities. All parochial schools were nationalized on June 16, 1948.

Under laws passed in 1927-28, optional social insurance was placed under the control of the national social insurance institute, which offered medical, hospital, old age and disability insurance. Insurance for farmers was made obligatory. The Land Reform Act issued in March, 1945, provided for the confiscation of all estates over 1,500 acres; about 8,000,000 acres were divided among some 500,000 families.

Agriculture is the basis of Hungarian economic life, engaging more than half the population. Of the total area, 63.6 percent can be cultivated and 17.9 percent is meadowland and rough pasture. Cereals grown in the fertile Danubian plains are the chief crops. Leading crops in 1947 were wheat (1,324,000 short tons), corn (2,050,000 tons), potatoes (2,105,600 tons), barley (448,600 tons), rye (539,900 tons) and sugar beets (1,357,500 tons). The cultivation of vines, fruit and garden produce is important; the famous Tokay wine is produced on the southern slopes of the Hegyalja in the northeast. Wine production averages 100,000,000 U. S. gallons annually.

Horse-breeding is a traditionally important branch of agriculture. Hungarians have a great love for horses, and their excellent breeds were exported in large numbers before World War II. Livestock in 1947 included 456,897 horses, 1,404,758 cattle, 474,003 sheep and 2,106,417 swine.

The dominant industries are all based on agriculture, with flour milling in first place, followed by sugar refining, brewing and canning. The second group of industries make hardware and machinery. Most of the machine industry is concentrated in Budapest and Győr. Cotton leads the textile industry, especially in Budapest, which is also a center of woolen manufacturers. Hemp and flax weaving are important. In 1943 there were about 4,350 manufacturing establishments with 390,000 workers. About 90 percent of industrial production was nationalized under laws enacted in 1946 and 1948. Legislation in the latter year affected about 500 mining and industrial enterprises employing more than 100 persons each. In addition, the Soviet Union has taken over all German-owned plants as reparations, and in 1946 Soviet-Hungarian companies were formed to exploit bauxite, petroleum, and air and river navigation.

Exports in 1947 were valued at 1,042,100,000 forint and imports at 1,460,200,000 forint. Reparation deliveries were valued at a billion forint. Leading free exports were poultry, cotton textiles, mineral oil, hardware and electrical machines and appliances. Foreign trade is being redirected toward the eastern and central European nations within the Soviet bloc.

The focal point in the country's transportation system is the Danube River navigable for 423 miles in Hungary. The nation's central location makes it the center of an important transit trade; its prewar river fleet was the largest on the Danube. Railroad mileage in 1946 totaled 5,416, highway mileage 18,508. Transportation facilities suffered heavy damage in the last part of the war, and more than 80 percent of railway equipment was destroyed.

The 1947-48 budget fixed expenditures at 7,553,700,000 forint and revenue at 7,

576,100,000 forint. The national debt (post-war only) on Dec. 31, 1946 totaled 1,630,000,000 forint.

While Hungary generally is mineral-poor, it has an estimated 250,000,000 tons of bauxite—about 25 percent of the world's known reserves. Production in 1946 was estimated at 111,000 short tons. The coal is of low quality and is insufficient to meet domestic needs; production in 1946 was 800,000 tons, and output of lignite was 6,200,000 tons. Other minerals include iron ore, manganese and gold. Petroleum production in 1946 totaled about 4,240,000 barrels.

About 12 percent of Hungary is forested, but the products are of little importance. There are valuable fisheries in Lake Balaton.

TOPOGRAPHY AND CLIMATE. Most of Hungary is a fertile, rolling plain lying east of the Danube, and drained by the Danube and the Tisza Rivers. In the extreme northwest is the Little Hungarian Plain. South of that area is Lake Balaton, 250 square miles, the largest lake of western and central Europe; to the west of it lies the Bakony Forest, part of an upland extension of the Alps, called the Hungarian Mittelgebirges. Entering Hungary in the northwest, the Danube flows south through the central plain. The Tisza, rising in the eastern Carpathians, also flows south through eastern Hungary.

Hungary's mean annual temperature ranges from 48° in the north to 52° in the south. Precipitation varies from 30 to 35 inches in the Bakony Forest to less than 15 inches in the east; most of the rain falls in May and June. High summer temperatures and a long autumn are favorable to agriculture.

Iceland (Republic)

(Island)

Area: 39,709 square miles.*

Population (est. 1946): 132,750 (almost entirely Icelandic).

Density per square mile: 3.3.

President: Sveinn Björnsson.

Prime Minister: Stefan Johann Stefansson.

Principal city (est. 1945): Reykjavik, 46,578 (capital and only large town).

Monetary unit: Króna.

Languages: Icelandic, Danish.

Religion: Evangelical Lutheran.

*Including several off-shore islands.

HISTORY. Iceland, in the North Atlantic on the rim of the Arctic Circle, did not fight in World War II, but still it won and lost in the conflict. It won its complete independence from Denmark but lost its placid isolation when the United States and Great Britain moved in to prevent

German seizure, and to establish air and naval bases. A new era then dawned for Iceland. Because of its strategic position on the great-circle air route between America and Europe, about halfway between New York and Moscow, the country assumed new significance in an air-minded world.

Iceland was first settled shortly before 900, mainly by Norse. A constitution drawn up about 930 created a form of democracy and provided for an Althing, or General Assembly, now the oldest legislative body in the world. In 1262-64, Iceland came under Norwegian-Danish rule. Through five centuries of intermittent plague, earthquake, famine and volcanic eruption, the stout Icelanders endured, and in 1874 they obtained their own constitution. In 1918 Denmark recognized Iceland as a separate state with unlimited sovereignty, but still nominally under the Danish king. On June 17, 1944, after a popular referendum, the Althing proclaimed Iceland a completely independent republic.

The British occupied Iceland in 1940, immediately after the German invasion of Denmark. In 1942, the United States took over the burden of protection. Iceland refused to abandon its neutrality in World War II, and thus forfeited charter membership in the United Nations, but it was co-operative with the Allies throughout. Since the end of the war, the country has been apathetic toward foreign bids for air bases and other rights.

GOVERNMENT. Constitutionally, the president is elected for four years by popular vote. President Björnsson was named to the office in 1944 by acclamation of the Althing and was re-elected in June, 1945, for the regular four-year term. Executive power resides in a Prime Minister, assisted in 1948 by a five-man coalition cabinet. The Althing is composed of two houses, one with 17 members and the other with 35; each has equal constitutional power. Iceland has no army or navy.

SOCIAL AND ECONOMIC CONDITIONS. Illiteracy is virtually unknown in Iceland. Education is compulsory from 7 to 14, and mobile schools are sent traveling through the sparsely settled areas. When the University of Iceland, established in 1911, needed new buildings in 1935, the government licensed it to conduct a national lottery to raise the funds. The high number of scholarships and the low tuition fees make higher education virtually free to any qualified applicant.

Iceland publishes more books, newspapers and magazines per capita than any country in the world. Its language, Icelandic, has no dialects and has changed little through the centuries. In addition, Danish is widely understood and spoken. The Evangelical Lutheran Church is state-supported, but there is complete religious freedom. A

social insurance system set up in 1935 provides accident, sickness and old age benefits.

Approximately six-sevenths of Iceland is unproductive, and only one-fourth of one percent is under cultivation. With about 30 percent of the population engaged in farming, sheep raising is the most important branch of this industry. Hay, potatoes and turnips are the principal crops.

About one-sixth of the people are engaged in fishing, and fish and fish products make up the bulk of Iceland's exports. The annual catch averages about 350,000 tons (1947: 431,170 tons), and the total value of the industry was estimated in 1944 at about \$22,000,000. British, French and Norwegian fishing craft visit Iceland's fisheries, which lead the world in cod and are important for herring, plaice and halibut.

In 1947, exports totaled 290,482,000 kr. and imports 519,078,000 kr. Fresh fish, herring oil and salt fish accounted for 75 percent of the exports. Principal customers were Great Britain (37%), the U.S.S.R. (18%) and Italy (8%); chief suppliers were Britain (36%) and the U. S. (23%).

Iceland has no railways. Highways totaled 3,800 miles in 1948. Motor vehicles are rapidly replacing the traditional horse-drawn cart. In 1948 the merchant marine totaled 732 vessels of 60,338 gross tons.

Expenditures for the calendar year 1948 were estimated at 221,084,171 kr. and revenue at 221,411,150 kr. The public debt was 65,728,248 kr. on Dec. 31, 1946.

TOPOGRAPHY AND CLIMATE. Iceland, a bleak, volcanic island about the size of Kentucky, has maximum dimensions of 298 by 194 miles; it is mostly tableland, high, rugged and barren. It is one of the world's most volcanic regions. Mt. Hekla (4,747 ft.), near the southern coast, is the most notable of its volcanoes, many of which are still active and cause frequent earthquakes. Small fresh-water lakes are found throughout the island, and there are many natural oddities including hot springs, geysers, sulfur beds, canyons, waterfalls and swift rivers. More than 13 percent of the area is covered by snowfields and glaciers, and most of the people live in the 7 per cent of the island comprising fertile coastlands. One-third of the much-indented, 3,730-mile coastline belongs to a peninsula to the northwest, joined to the mainland by an isthmus four miles wide. Vegetation is of the Arctic type, mostly stunted. Except for peat and fisheries, Iceland has no natural resources.

The Gulf Stream modifies Iceland's climate to make it much like that of southern Canada, though with longer winters and shorter summers. The mean annual temperature at Reykjavik is 39.4°, with January the coldest month (34.2°) and July the warmest (51.6°).

Iran (Kingdom)

Area: 634,413 square miles.

Population (est. 1940): 17,000,000 (Iranian, Kurdish, Azerbaijani).

Density per square mile: 26.7.

Ruler: Mohammed Riza Pahlavi.

Prime Minister: Abdul Hussein Hajir.

Principal cities (est. 1944): Teheran, 800,000 (capital); (census 1940): Tabriz, 213,542 (capital, Azerbaijan), Isfahan, 204,592 (cotton, tobacco); Meshed, 176,471 (Moslem shrine); Shiraz, 129,000 (wine, sugar beets).

Monetary unit: Rial.

Languages: Iranian (Persian), Kurdish, Azerbaijani.

Religions: Moslem (Shiah), about 90%; Moslem (Sunni), about 5%; Armenian; Jewish; Nestorian; Parsi.

HISTORY. Oil-rich Iran, roughly one-fifth the size of the United States, was called Persia before 1935. Its key location blocks the lower land gate to Asia, and also stands in the way of traditional Russian ambitions for access to the Indian Ocean. In modern times, Iran has drawn Big Power interest because of its rich oil deposits.

Iran's history is a long one of rising and falling dynasties. After periods of Assyrian, Median and Achaemenidian rule, Persia became a powerful empire under Cyrus the Great, reaching from the Indus to the Nile at its zenith in 525 B.C. It fell to Alexander in 331-30 B.C., to the Selucidae in 312-02 B.C., and to the Parthians about 130 B.C. A native Persian regime arose about A.D. 224, was weakened fighting the Turks, and fell to the Arabs in 637. In the 12th century the Mongols took their turn ruling Persia, and in the early 18th century the Turks and Russians occupied it. In modern times, Russia, Turkey, Britain, France, and most recently, the United States, all have taken keen competitive interest in Iran.

An Anglo-Russian convention of 1907 divided Iran into two spheres of influence. British attempts to impose a protectorate over all of Iran were defeated in 1919. On Feb. 26, 1921, General Riza Pahlavi seized the government and was elected hereditary shah in 1925. Subsequently he did much to modernize the country, and abolished all foreign extraterritorial rights.

Increased pro-Axis activity led to Anglo-Russian occupation of Iran in August, 1941, and deposition of the shah in favor of his son, Mohammed Riza Pahlavi.

In November, 1945, a Soviet-inspired autonomist movement won control of Azerbaijan, Iran's northwest province. To protect their advantage, the Russians kept troops in that area past the treaty evacuation date of March 2, 1946. The Iranian promptly protested this breach of agreement to the United Nations. The Russian evacuated their troops on May 6 but not before they had forced Iran to promise them oil concessions in the north.

Iranian troops reoccupied Azerbaijan in Dec., 1946, to clear the way for parliamentary elections which, held in Jan., 1947, resulted in a victory for Ghavam-es-Saltaneh's Government party.

Parliament rejected the Soviet oil pact in Oct., 1947, and following a sharp Soviet note protesting this action, Ghavam-es-Saltaneh lost the parliament's confidence and was replaced on Dec. 28 by the aged Ibrahim Hakimi, who was succeeded on June 15, 1948, by Abdul Hussein Hajir.

GOVERNMENT AND DEFENSE. Iran is a constitutional monarchy, and the shah has the usual powers of the head of a parliamentary state. Executive power is exercised by a cabinet headed by the prime minister, who is appointed by the shah and is responsible to the Majlis (parliament), which has 136 popularly-elected members.

Military service is compulsory; the initial training period is 2 years. The army, modernized and reorganized by Riza Pahlavi, father of the present shah, consists of about 90,000 men. The air force has several hundred planes, and the navy several small craft in the Persian Gulf. There is also a U. S.-trained police force of 20,000.

SOCIAL AND ECONOMIC CONDITIONS. Education has made good progress in the last 25 years, supplanting the old and essentially religious system. In 1938 there were 8,381 schools with attendance of 457,236. A university was opened at Teheran in 1934. Illiteracy is high, though decreasing.

Iran is predominantly agricultural. Large estates are numerous, and irrigation is common, especially on the central plateau. The principal crops are wheat (estimated production 1946: 20,800,000 quintals) and barley (12,400,000 quintals). Rice production, confined largely to the Caspian provinces, was estimated at 4,234,000 quintals in 1946. Other crops include grapes, dates, apricots, tobacco, tea, cotton, sugar, beets and corn. There are extensive grazing lands. Wool in 1943 was estimated at 13,200 tons; in 1947 there were 13,190,000 sheep.

Iran must still import many manufactured necessities, but several new factories were established by the government after 1925. These included 7 beet sugar plants (1945 output: 28,600 tons); rice mills, oil mills, textile factories, a cement factory, copper smelter, glycerine factory and small arms factory. The Chalus silk mill produces 1,000,000 yards or more a year. Both sugar and tobacco are government monopolies. The manufacture of carpets, for which Iran is famous, is the most valuable industry (exports 1944: 1,165 tons).

Iran's exports in 1946-47 totaled \$10,340,000,000 rials, and imports 4,950,000,000 rials. Principal exports (excluding petroleum, which normally constitutes about 75 percent of the total) are cotton, wool, opium, rice, almonds and sheep casings.

Leading imports are cotton piece goods, tea, sugar, drugs and chemicals.

In 1938, there were 8,700 miles of motorable roads, and during World War II Allied engineer troops improved several hundred miles. Railway mileage totals about 1,270. The principal line (870 mi.) connects Bandar Shahpur on the Persian Gulf with Bandar Shah on the Caspian Sea. It carried 5,000,000 tons of supplies to Russia during World War II. Iranian State Airlines and other lines provide service.

The budget for 1948-49 forecast revenue of 7,154,000,000 rials and expenditures of 8,891,000,000 rials. The public debt (1944) was \$76,925,000. Incomes from various monopolies and oil royalties are important.

Considerable mineral wealth exists, but only oil is exploited commercially. The principal field, near Shushar in the southwest, is worked by the Anglo-Iranian Oil Company, whose concession began in 1901 and runs to 1993. Royalties are paid to Iran on a tonnage basis. Production in 1947 was 20,194,823 long tons. The refinery at Abadan processed 18,565,507 tons.

The main forest belt on the northern Elburz slope supplies railroad ties, charcoal and firewood. Gums are the most valuable forest product. Fisheries are worked in the Persian Gulf and the Caspian Sea. **TOPOGRAPHY AND CLIMATE.** Iran is, in general, a plateau averaging 4,000 feet elevation. In addition, there are maritime lowlands along the Persian Gulf and the Caspian Sea. The Elburz Mountains in the north rise to 18,603 feet at Mt. Demavend. From northwest to southeast, the country is crossed by a desert 800 miles long and 100 to 200 miles wide. Iran's only navigable river is the Karun in the southwest.

The central plateau is hot in summer and very cold in winter, but the Caspian area has a sub-tropical climate. Mean temperatures vary at Teheran from 35° in January to 85° in July (yearly average 62°); at Bushire, on the Persian Gulf, from 58° in January to 90° in July and August (average 75°). Rainfall is light.

Iraq (Kingdom)

Area: 116,600 square miles.

Population (est. 1946): 4,803,430 (Arab, 75%; Kurdish, 15%; Iranian, 3.75%; others, 6.25%).

Density per square mile: 41.2.

Ruler: King Faisal II.

Regent: Crown Prince Abdul-Ilah.

Prime Minister: Muzahim el Pachachi.

Principal cities (est. 1946): Baghdad, 832,927 (capital); Mosul, 279,361 (farming, oil); Basra, 181,814 (chief port).

Monetary unit: Dinar.

Languages: Arabic, Kurdish.

Religions: Moslem (Shiah), 53%; Moslem (Sunni), 35%; Christian, 2.8%; Jewish, 2.5%; others, 6.7%.

HISTORY. Iraq, a triangle of mountains, desert and fertile river valley less than half the size of Texas, is bounded east by Iran, north by Turkey, west by Syria and Trans-Jordan, and south by Saudi Arabia. From earliest times it has been known as Mesopotamia—the land between the rivers—for it embraces a large part of the alluvial plains of the Tigris and Euphrates.

An advanced civilization existed in Mesopotamia by 4000 B.C. Sometime after 2000 B.C. it became the center of the ancient Babylonian and Assyrian empires. It was conquered by Cyrus the Great of Persia in 538 B.C., and by Alexander in 331 B.C. After an Arab conquest in A.D. 637-40, Baghdad became capital of the ruling caliphate. The country was cruelly pillaged by the Mongols in 1258, and during the 16th, 17th and 18th centuries was the object of repeated Turkish-Persian competition.

Nominal Turkish suzerainty imposed in 1638 was replaced by direct Turkish rule in 1831. In World War I an Anglo-Indian force occupied most of the country, and Britain was given a mandate over the area in 1920. The British recognized Iraq as a kingdom in 1922 and terminated the mandate in 1932, when Iraq was admitted to the League of Nations. In World War II, Iraq generally adhered to its 1930 treaty of alliance with Britain, but in 1941 British troops were compelled to put down a pro-Axis revolt led by Prime Minister Rashid Ali. Iraq became a charter member of the Arab League in March, 1945 and Iraqi troops took part in the Arab invasion of Palestine in May, 1948.

King Faisal II, born on May 2, 1935, succeeded his father, Ghazi I, who was killed in an automobile accident on April 4, 1939. The king's uncle, Abdul-Ilah, is regent.

GOVERNMENT AND DEFENSE. Under the 1924-25 constitution, Iraq is a hereditary monarchy with a two-house Parliament. The 20-member Senate is named by the king for eight years; the 115-member Chamber of Deputies is elected popularly for four years. Executive power is vested in a Council of Ministers, headed by the prime minister, whom the king appoints.

Military service is compulsory, with an initial training period of $1\frac{1}{2}$ to 2 years. Army and air force strength in 1938 was 28,000. Both were trained and re-equipped by the British during World War II. The British-trained police force numbers about 21,000. The 1930 treaty gives Britain the provisional right to keep troops in Iraq.

SOCIAL AND ECONOMIC CONDITIONS. Primary education is free and nominally compulsory. Secondary education is neither free nor compulsory. In 1945-46 there were 944 state elementary schools with 97,453 pupils and 78 intermediate and secondary schools with 12,511 pupils. Fourteen colleges had a combined enrollment of 2,750.

There are no universities in the country.

The chief economic activity is agriculture, dependent upon irrigation and confined to the valleys of the Tigris and Euphrates. Iraq supplies about 80 percent of the world's dates (1946-47 exports: 242,000 short tons). Chief among the cereal products are barley (1946: 10,000,000 quintals), wheat (1946: 7,000,000 quintals), rice, sorghum, maize and millet. Many fruits and some tobacco and cotton are grown. Grazing is the principal occupation of the many nomadic and seminomadic tribes. Livestock estimates included 865,800 cattle in 1945 and 8,000,000 sheep in 1946. Annual wool output: 6,000 tons.

Industry is still embryonic. Of approximately 100 manufacturing firms, the most important are those making brick, tile, woolen textiles, vegetable oils, soap, glass and cigarettes.

Exports in 1945, including oil, totaled 18,900,000 dinars, and imports 20,900,000 dinars. The U. S. was the main supplier (19%); Britain, Syria and Palestine were leading customers. Chief exports are petroleum, dates, wool, hides and skins.

The only port for seagoing vessels is that of Basra, located on the Shatt al-Arab River near the head of the Persian Gulf. River vessels plying the Tigris between Basra and Baghdad have tonnage of more than 60,000. There are about 4,000 miles of improved and unimproved roads. Iraq State Railways, the only rail line, operates three lines totaling 966 miles. There is an airport and seaplane base at Basra.

Oil production centers at the Baba Gur-gur fields near Kirkuk, operated on behalf of an international group by the British-managed Iraq Petroleum Company. The oil is piped to Haifa in Palestine and Tripoli in Lebanon. Another field is operated by the Kanaqin Oil Company (Anglo-Iranian Oil Company subsidiary), and produces only for local consumption. Iraqi output in 1946 was 4,674,262 long tons.

Ordinary revenue (1945-46) was estimated at 22,158,540 dinars, and ordinary expenditures at 22,777,386 dinars. The capital works budget, based on oil royalties, usually balances the ordinary budget. There is no external debt.

TOPOGRAPHY AND CLIMATE. Iraq has arid desertland west of the Euphrates, a broad central valley between the Euphrates and Tigris, and mountains in the northeast. The fertile lower valley is formed by the delta of the two rivers, which join about 120 miles from the head of the Persian Gulf. The gulf coast line is 26 miles.

Iraq's climate, generally, runs to great extremes—long hot summers and short cold winters. The area on the Persian Gulf is one of the hottest places in the world. Average temperature at Baghdad is 49° in January and 92° in July and August.

Israel (Republic)

Area (approximate): 5,500 square miles.

Population (approximate): 1,000,000.

President (provisional): Dr. Chaim Weizmann.

Premier: David Ben-Gurion.

Principal cities (est. 1946): Tel Aviv, 183,000 (provisional capital); Haifa, 145,430 (chief port).

Monetary unit: Israeli pound.

Israel, the first Jewish state in Palestine since Roman times, came into existence at midnight May 14, 1948, upon expiration of the British League of Nations mandate over Palestine. The new state was immediately plunged into a desperate struggle for existence as Arab forces converged on Palestine from the east, south and north.

Israel's declaration of independence, promulgated on May 14 by the Jewish National Council (*Vaad Leumi*), stated that the new nation would be "based on the precepts of liberty, justice and peace taught by the Hebrew prophets" and guaranteed Arab inhabitants of Israel equality of citizenship and representation in all Israeli institutions. It called for the election by Oct. 1 of an Israeli constituent assembly which was to draft a constitution. In the meantime, Israel was governed by a provisional regime composed of the existing 37-member National Council and a cabinet of ministers responsible to it.

The declaration of independence based Israel's claim to freedom on the "natural and historic right of the Jewish people" and on the U.N. partition scheme. It made no claim to specific areas in Palestine, but the boundaries of the new state probably will be delineated in due course to include all areas awarded to the Jews by the partition plan and possibly other smaller segments of territory.

The partition plan had awarded three distinct parts of Palestine to the Jews. The northernmost, situated immediately west of the River Jordan and around the shores of the Sea of Tiberias, has Safad and Tiberias as its most important towns, and includes the greater part of the valley of Jezreel. The western and economically most important region lies along the Mediterranean from Haifa and the Plain of Esdraelon in the north to the Rehoboth area in the south and includes the coastal plain of Sharon—the center of Palestine's citrus industry—the port of Haifa, one of the best in the near East, and the city of Tel Aviv, a growing industrial center. The third region consists of the greater part of the Negeb, the southern desert area with an outlet to the Red Sea at the head of the Gulf of Aqaba. All of these areas had been occupied by Israel forces by mid-1948 with the exception of part of the Negeb. In addition, Israel held western Galilee, awarded to the Arabs under the partition

plan, and a broad corridor from Tel Aviv to Jerusalem through central Palestine, all of which had been awarded to the Arabs, as well as part of modern Jerusalem, which under the partition plan was to be placed under U.N. trusteeship.

Count Folke Bernadotte, of Sweden, official U.N. mediator, proposed modifications to this plan in his final report, presented to the U.N. three days after his assassination. Under this plan all the Negeb would go to the Arabs; all Galilee (instead of the eastern part only) to Israel; Haifa would become a free port in Israel; the airport at Lydda would be free; Jerusalem would be under U.N. control. Should the Arabs and Israel not agree upon the final demarcation, the U.N. should impose its own settlement. (See also PALESTINE).

Italy (Republic)

(Repubblica Italiana)

Area (Jan. 1948): 116,224 square miles.

Population (est. 1947): 46,110,000 (predominantly Italian).

Density per square mile: 396.7.

President: Luigi Einaudi.

Premier: Alcide de Gasperi.

Principal cities (est. 1947): Rome, 1,599,894 (capital); Milan, 1,267,156 (leading financial, industrial center); Naples, 1,020,085 (seaport); Turin, 709,817 (auto works); Genoa, 656,447 (seaport); Palermo, 465,356 (Sicilian seaport).

Monetary unit: Lira.

Religions: Roman Catholic, 99.6%; others (Protestant, Orthodox, Jewish), .4%.

HISTORY. Italy was in the forefront of the "cold war" between East and West during 1948, but the sharp defeat of its Communist party in the national elections of April, 1948, brought the country firmly into the western camp. A former German satellite and later a cobelligerent of the Allies, Italy was still in dire need of economic aid as it passed through its first year under a new republican constitution. Internationally its rehabilitation was retarded only by Soviet refusal to permit its entry into the U.N.

About the size of New Mexico but long and narrow in shape, Italy did not exist as a unified country until 1870. Until A.D. 476, when the German Odoacer became head of the Roman Empire in the west, the history of Italy was largely the history of Rome. From A.D. 800 on, the Holy Roman Emperors, the Popes, Normans, Lombards and Saracens all vied for control over various segments of the Italian peninsula. Numerous city states, such as Venice and Genoa, and many small principalities flourished in the late Middle Ages.

In 1713, after the War of the Spanish Succession, Milan, Naples and Sardinia were handed over to Austria, but the Hapsburg influence on the peninsula was inter-

rupted for a short time after 1800 when Italy was unified by Napoleon, who crowned himself King of Italy on May 26, 1805. After the Congress of Vienna in 1815, Austria continued to be the dominant power in Italy.

The movement for national unity began in the middle 19th century, staged by the "Young Italy" group headed by Giuseppe Mazzini. In 1858 Count Cavour, prime minister under King Victor Emmanuel II of Sardinia, secured the aid of Napoleon III of France in unifying Italy. After French and Sardinian forces had defeated the Austrians in 1859, Lombardy was annexed to Sardinia, and by the time the first Italian parliament opened at Turin in Feb., 1861, all Italy was represented except Venetia, held by Austria, and Rome, which was the territory of the Pope. On February 18, 1861, Victor Emmanuel II was proclaimed King of united Italy.

In 1866 Italy sided with Prussia against Austria and received Venetia; Rome was seized in 1870. In 1882 the young nation entered into the Triple Alliance with Austria and Germany. After war with Turkey in 1911-12, the Italians were awarded Tripoli in North Africa and the Dodecanese islands in the Aegean Sea.

Italy denounced the Triple Alliance on May 3, 1915, and declared war on Austria on May 24. By the treaty of St. Germain, on Sept. 10, 1919, the south Tirol and the Istrian peninsula were awarded to Italy.

In the years immediately following World War I, Italy was a virtual battleground between the Socialists and Benito Mussolini's new Fascist movement. The weak government was powerless to maintain order as the two sides fought for power. Finally, on Oct. 30, 1922, the Fascists staged their "March on Rome" and took over the government. Mussolini was named premier by King Victor Emmanuel III. The Duce and his Fascist Grand Council soon made Italy into a corporate state, with himself as dictator.

In 1935-36 Italy successfully invaded, conquered and annexed Ethiopia, despite the complaints of the League of Nations and economic sanctions.

On November 6, 1937, Italy joined the German-Japanese anti-Comintern pact and on December 11, withdrew from the League of Nations. The Rome-Berlin Axis was converted into a full military alliance on May 22, 1939. Meanwhile, Italian troops had seized Albania in April, 1939.

WORLD WAR II. On June 10, 1940, Mussolini announced a declaration of war against France (already in the throes of defeat) and Britain. Italian troops were able to advance only a few miles into France before the Armistice was concluded on June 24, under which Italy annexed a small strip of France. On October 28, 1940,

Italian forces invaded Greece from Albania, but were driven back by the Greeks, who held a third of Albania by the time the Germans launched their Balkan campaign on April 6, 1941. Italy subsequently occupied parts of Yugoslavia and Greece. Following the German capitulation in North Africa and the fall of Sicily, Mussolini was ousted on July 25, 1943, and Marshal Pietro Badoglio formed a new government. On September 3, 1943, the date of the invasion of the Italian mainland by Allied forces, a military armistice was signed between General Eisenhower and Badoglio, and the legislative and administrative activities of the government were made subject to the approval of an Allied Commission.

On June 9, 1944, five days after the Allies entered Rome, Badoglio was succeeded as premier by Ivanoe Bonomi, a Socialist, who formed a coalition cabinet. The government was recognized by the Allies as the *de facto* government of Italy on October 25, but only as a co-belligerent, not as an ally. Later it was given full legislative powers and the right to resume diplomatic relations.

Upon the collapse of German resistance in the north, Mussolini was tracked down and put to death by partisan forces on April 28, 1945. On December 10, Alcide de Gasperi, a Christian Democrat, took over from Ferruccio Parri, who had succeeded Bonomi as premier in June.

On June 2, 1946, the Italian people voted in favor of a republic, and King Humbert II, who had succeeded his father on May 9, went into exile. De Gasperi remained at the helm, first with a coalition cabinet and later (June, 1947) with a Christian Democrat-Independent government.

The new constitution drafted by the constituent assembly took effect on Jan. 1, 1948. Following the Communist defeat in the elections of April, 1948, De Gasperi formed another coalition cabinet from which the Communist and left-wing Socialist bloc was again excluded. Luigi Einaudi, veteran Liberal leader, was elected first president of Republic May 11. Widespread disorder and flash strikes followed an attempted assassination of Palmiro Togliatti, Communist leader, in July.

GOVERNMENT. Under the 1947 constitution Italy is a "democratic Republic founded on labor." The president is elected for seven years by parliament in joint session with regional delegates. The cabinet headed by the premier and nominated by the president, must enjoy the confidence of parliament, which is composed of the Chamber of Deputies, popularly elected for a five-year term, and the Senate. All citizens are duty-bound to vote.

Articles 115-133 of the constitution introduced a new concept of regional auton-

omy, dividing the country into 19 regions with locally-elected governments which control regional affairs. Five regions, including the islands of Sicily and Sardinia, enjoy a special degree of autonomy. Below the regions in the governmental organization are the provinces and communes.

The Chamber of Deputies, elected on April 18, 1948, has 574 members, of whom 307 are Christian Democrat, 182 Popular Front (Socialist-Communist coalition), 33 right-wing Socialists, and 52 members of other parties. The senate has 343 members, 237 of whom are elected by the regions; the other 106 are deputies who were imprisoned during the Fascist regime and former premiers who under the constitution, hold their seats for life.

PEACE TREATY OF 1947. The peace treaty which took effect Sept. 15, 1947, required Italian renunciation of all claims in Ethiopia and Greece, the cession of the Dodecanese to Greece, and of five small Alpine areas to France. In addition, the major part of the Istrian peninsula, including Fiume and Pola, went to Yugoslavia. The Free Territory of Trieste was carved out of the area to the west of the new Yugoslav frontier.

Italy was to pay reparations of \$100,000,000 in kind over a seven-year period to the Soviet Union, \$125,000,000 to Yugoslavia, \$105,000,000 to Greece, \$25,000,000 to Ethiopia and \$5,000,000 to Albania; also to make two-thirds restitution for wartime damage to Allied property in Italy.

DEFENSE. The 1947 treaty required Italy to reduce the strength of her army to 250,000 men (including *carabinieri*), the navy to 25,000 (including naval air arm) and the air force to 25,000 (with 350 planes). The fleet was reduced to 2 battleships, 4 cruisers, 20 destroyers and large torpedo boats, plus smaller craft. Major war vessels placed at the disposal of the Big Four included 3 battleships, 5 cruisers, 8 submarines and 13 destroyers and large torpedo boats. Extensive areas along Italy's borders and in the outlying islands were demilitarized.

EDUCATION. Elementary education is free and compulsory from 6 to 14. Governmental and private elementary schools in 1941-42 numbered 139,571 with 5,110,328 pupils. Governmental and other secondary schools in the same academic year numbered 5,136 with 556,260 students. In 1942-43 there were 29 royal universities and institutes and 6 private universities and institutes with a total of 164,853 students. The University of Rome had 14,210 students in 1939; Naples had 12,289 and Milan 7,913.

RELIGION. Although the country is predominantly Roman Catholic, religious freedom is permitted. Catholic religious teaching is given in all elementary and intermediate schools. Relations with the

Church are regulated by the treaty with the Holy See of Feb. 11, 1929, which established the temporal power of the Pope over Vatican City.

AGRICULTURE. Agriculture, the most important branch of Italy's economy, engages more than a third of the population. It is extremely diversified; differences of altitude, soil and climate allow the production of all European crops from rye to rice, from apples to oranges, and from hemp to cotton. Approximately 28,000,000 acres are cultivated. Italy ranks next to France in wine production (average 1931-42: 1,024,000,000 gal.; 1947: 841,680,000 gal.) and next to Spain in olive oil production. The silk industry is centered in northern Italy and along the eastern coast. Production of silk cocoons in 1946 was 22,500 short tons, slightly above the 1938 figure. The Italian climate and soil are well suited to fruit growing.

AGRICULTURAL PRODUCTION 1947

Crop	Acres	Metric tons
Wheat	11,107,936	4,673,800
Rye	243,181	97,181
Barley	599,306	178,271
Oats	1,187,367	446,417
Sugar beets	273,920	223,500*
Olives	5,463,589	257,687†

*Sugar. †Olive oil.

Livestock and dairy farming are important in Italy. Of the 50-odd varieties of Italian cheese, the best known are the hard parmesan and pecorino (the latter made from ewe's milk) and the soft *bel paese* and *gorgonzola*. In 1946, Italy had 6,900,000 cattle, 8,692,000 sheep and goats, 3,200,000 hogs and 63,000,000 poultry.

Before World War II the Fascist government carried on a wide land reclamation program, mostly in Emilia, Apulia, and the Venetian provinces.

INDUSTRY. Prior to World War II, there were approximately 730,000 industrial establishments in Italy, of which more than 1,000 employed at least 250 workers each. In 1940, approximately 3,825,000 workers were employed in industry. While a large proportion of small and medium sized concerns were common in industry before World War II, there was a growing tendency, fostered by the nature of the corporate state, toward industrial concentration. The textile industry, largest and most important, ordinarily supplied most of the home markets and left a large margin for export. It made rapid recovery after World War II, accounting for nearly half of Italian exports in 1946. The metal industries are handicapped by lack of coal and of sufficient iron ore reserves. The chemical, clothing and food industries are also important.

Steel production in 1947 totaled 1,703,827 metric tons and pig iron, 317,645 tons.

In 1946, wool production was 12,360 short tons, cotton goods 132,000 tons, rayon 32,233 tons and staple fibre 14,740 tons.

Italy's full participation in the European Recovery Program in 1948-49 was expected to have a stimulating effect on the nation's war-shattered economy and to relieve at least partially the food deficits resulting from over-population.

TRADE. Statistics of Italy's foreign trade, in billions of lire, are as follows:

	1938	1946	1947
Exports	10.5	54.5	205.7
Imports	11.3	84.2	413.8

Italy's leading customers by value in 1947 were Switzerland, 11.1%; Britain, 9.0%; Argentina, 8.2%; the U. S., 6.2% and Sweden, 8.2%. Principal suppliers were: U. S., 42.8%; Argentina, 5.0%; Switzerland, 3.5%; Belgium, 3.2%; and Australia, 3.2%. Chief exports were rayon textiles, 15.8%; fruits and vegetables, 14.6%; cotton manufactures, 11.9%; machinery and apparatus, 8.6%; and wool manufactures, 7.1%. Leading imports included grain, coal, cotton, wool and petroleum products.

NATURAL RESOURCES. Italy is ordinarily the world's largest producer of mercury, although Spain took first place in 1944-45; it is also an important producer of sulfur. In 1947 were produced 1,858 metric tons of mercury and 148,432 tons of sulfur. The nation lacks, however, the staple minerals of coal, oil and iron, and is forced to import them. Production of coal and related fuels totaled 3,222,550 tons in 1947; 8,830,542 tons of coal were imported. Building stone, particularly marble, is plentiful. In the south Tirol and the central Apennines, Italy has abundant water power.

Less than 20 percent of Italy's area is forested. Principal products are soft and hard timber, charcoal and cork. The fishing industry does not fill domestic needs. Coral and sponges are marketed.

COMMUNICATIONS. The merchant marine on June 30, 1947, totaled 673 ships of 1,300,987 gross tons as opposed to a total of more than 2,000,000 tons in 1939. On April 1, 1948, 70 vessels of 215,200 tons were under construction in Italian yards. There are more than 150 seaports, of which the principal are Genoa, Venice, Savona, Naples and Leghorn. Coastwise traffic is particularly important because of difficult land communications. Railways open to traffic in 1947 totaled 9,909 miles, of which 2,846 miles were electrified. Highways in 1940 totaled 126,830 miles, of which about 10 percent were State roads.

FINANCE. The monetary unit is the lira; the official rate is 350 to the U. S. dollar. The 1948-49 budget estimated revenue at 705,000,000,000 lire and expenditure at 1,087,000,000,000 lire. The national debt on April 30, 1948, was 2,553,000,000,000 lire.

UNRRA aid to Italy from 1945 through Sept. 30, 1947, amounted to \$418,410,000.

TOPOGRAPHY. Approximately 600 of boot-shaped Italy's 708 miles of length are in the long peninsula that projects into the Mediterranean from the fertile basin of the Po River. The Apennines, branching off from the Alps between Nice and Genoa, form the peninsula's backbone, and rise to a maximum height of 9,560 feet at the Gran Sasso d'Italia (Corno). The Alps are Italy's northern boundary.

Several islands form part of Italy. Sicily, 9,926 square miles, lies off the toe of the boot, across the Strait of Messina, with a steep and rock-bound northern coast and gentler slopes to the sea in the west and south. Mt. Etna, an active volcano, rises to 10,741 feet, and most of Sicily is more than 500 feet in elevation. Sixty-two miles southwest of Sicily lies Pantelleria, 45 square miles, and south of that are Lampedusa and Linosa. Sardinia, 9,301 square miles, just south of Corsica and about 125 miles west of the nearest Italian mainland, is largely mountainous, stony and unproductive.

Italy has many northern lakes, lying below the snow-covered peaks of the Alps. The largest are Garda (143 sq. mi.), Maggiore (83 sq. mi.) and Como (55 sq. mi.). The Po, the principal river, rises in the Alps on Italy's western border and flows across the Lombard plain into the Adriatic. The Arno and Tiber Rivers, rising in the Apennines, flow generally westward. Elsewhere are hundreds of short streams.

CLIMATE. Italy's climate is variable. The Italian Riviera along the Gulf of Genoa is subtropical and highly favored by tourists. The winters in the high Apennines are cold and bitter. The western slope of peninsular Italy is warmer than the eastern side, and the Po basin in the north has cold winters and very hot summers. Sicily basks in the warm and equable Mediterranean climate.

In Rome, December through February are the coldest months (average 47°), and July and August the warmest (75°). There is an abundance of sunshine.

FORMER ITALIAN COLONIAL EMPIRE

Country	Area. sq. mi.	Population (1947)
AFRICA		
Libya	679,183	1,098,786
Eritrea	89,274*	1,062,499
Italian Somaliland	270,972*	923,800
ASIA		
Dodecanese†	1,035	115,913

*Area during Italian occupation of Ethiopia.
†Ceded to Greece, 1947.

The 1947 treaty contained a renunciation by Italy of all right and title to her African possessions. These territories were to re-

main under British military administration pending their final disposal, to be determined jointly by the U. S., British, French and Soviet governments. These powers failed to reach agreement in Sept., 1948, and the question of disposition was referred to the U. N. General Assembly.

LIBYA—Former Status: part of Metropolitan Italy except Libyan Sahara (whole area now under British military occupation).

Capital: Tripoli (population 108,240).

Foreign trade (1947): exports, £3,197,236; imports, £2,360,395.

Agricultural products: barley, olive oil, wheat, figs, date palms, tobacco.

Mineral: salt.

Sea products: sponge, tuna.

Libya, lying along the north coast of Africa between Tunisia and Egypt, was a part of the Turkish dominions from the 16th century until 1911. Following the outbreak of hostilities between Italy and Turkey in the latter year, Italian troops occupied Tripoli; Italian sovereignty was recognized the next year by the Treaty of Ouchy. In 1934 the area was organized into four provinces—Bengasi, Derna, Misurata and Tripoltania—which were incorporated in 1939 into Metropolitan Italy, and a military territory in the south, Libyan Sahara (465,362 sq. mi.). Libya was the scene of much desert fighting during World War II. After the fall of Tripoli on Jan. 23, 1943, it came under British military occupation and government.

The area has three natural divisions from the coast inland—the Mediterranean coastland, the only region suitable for agriculture; the sub-desert, and the desert. About 5 percent of the population is Italian, the remainder native, mostly Moslem. The Senussi sect, which opposed Italian rule in Cyrenaica during World War I, exercises a strong position among the remoter oases in the hinterland. Railroads total 242 miles. Winters are cool and summers warm along the coast, and hotter in the interior. Bengasi has an average temperature of 55° in January and 78° in July.

ITALIAN SOMALILAND—Former Status: Italian colony (now under British military occupation).

Capital: Mogadiscio (population: 45,000).

Foreign trade (1947): exports, £441,955; imports, £983,041.

Agricultural products: dressed skins, cattle, sugar, cotton, cottonseed oil, fruits, bananas.

Forest products: gum, resin, kapok.

Mineral: tin.

Italian Somaliland, extending along Africa's east coast from the Gulf of Aden south to Kenya, fell within the Italian sphere of influence by treaties with the Somali sultans in 1889 and by agreements with Britain in 1905 and 1924; with the sultan of Zanzibar in 1905, and with Ethiopia in 1907. After the conquest of Ethiopia

in 1936, the area was incorporated into Italian East Africa. It was occupied in Feb., 1941, by British Imperial troops and, reduced to its pre-1936 area, has since been under British military administration.

The overwhelming majority of the population are Somalis who belong to the Sunni sect of Islam; they are a pastoral, nomadic people whose livelihood depends on cattle, sheep and camels. However, the Italians (numbering 3,000 in 1947) established plantations in the south, especially in the fertile Juba region. The colony was far from self-supporting, requiring heavy Italian subsidy. The climate is torrid.

ERITREA—Former Status: Italian colony (now under British military occupation).

Capital: Asmara (population: 85,000).

Foreign trade (1947): exports, £2,296,504; imports, £3,534,232. Chief exports: coffee, salt.

Agricultural products: coffee, barley, tobacco, sesame, hides, skins.

Minerals: gold, salt, potassium salts.

Sea product: pearls.

The first Italian inroad into Eritrea came in 1870 when the port of Assab and adjacent territory were bought from a native sultan; with British approval, Italian troops occupied Massaua in 1885. By a decree of Jan. 1, 1890, Italian possessions along the Red Sea were united into the colony of Eritrea. In 1936 Eritrea became a part of Italian East Africa. British and Indian troops captured Asmara on Apr. 1, 1941, and Massaua a week later; the area, reduced to its pre-1936 borders, has since been under British military occupation.

The principal native elements are the Ethiopians and Tigrés, who have close ethnic, linguistic and religious ties with peoples across the border in Ethiopia. Italians in 1947 totaled 26,499. Irrigation is essential in the low-lying coastal plains, and agriculture is practiced largely on the interior plateau (average elevation: 6,500 ft.) where the climate is suitable for European settlement. The pastoral industry engages most of the natives.

Along the coast, the climate is excessively hot and humid, especially in June, September and October; mean annual temperature at Massaua is 86°; the thermometer often rises to 120° in summer.

Japan (Empire) (Nippon)

Area: 146,690 square miles.*

Population (census Oct. 1, 1947): 78,626,719.*

Density per square mile: 536.0.

Supreme Commander for the Allied Powers: General of the Army Douglas MacArthur (U. S. A.).

Ruler: Emperor Hirohito.

Premier: Hiroshi Ashida.

Principal cities (census 1940): Tokyo, 6,778,-804 (capital, financial, manufacturing center); Osaka, 3,252,340 (chief industrial center); Nagoya, 1,328,084 (machinery, textiles); Kyoto, 1,089,725 (manufacturing); Yokohama, 968,091 (seaport, silk export center); Kobe, 967,234 (seaport, shipbuilding); Hiroshima, 343,968 (seaport, textiles); Fukuoka, 306,673 (seaport, textiles).

Monetary unit: Yen.

Language: Japanese.

Religions (1938): Buddhism, 60%; Shintoism, 21%; Protestant (215,166); Roman Catholic (118,856).

*Japan proper.

HISTORY. Japan, first of the aggressor nations which ultimately bound themselves into the Axis to wage World War II, was also the first of the Axis partners to make a semblance of recovery after utter defeat. Although stripped of her empire and under military occupation, Japan by 1948 had made some progress toward restoring its economy, and was enjoying a measure of political stability unknown to her wartime allies. Prospects for a final peace treaty with the Allies, however, still seemed remote, and unrest was growing.

Japan's early history is indistinguishable from mythology. One series of legends attributes the creation of Japan to the sun goddess, from whom the later emperors were allegedly descended. The first of them was Jimmu Tennō, supposed to have ascended the throne on Feb. 11, 660 B.C.

Recorded Japanese history begins with the first contact with China in the 5th century A.D. Japan was then divided into strong feudal states, all nominally under the emperor, but with real power often held by a court minister or clan. In 1185 Yoritomo, chief of the Minamoto clan, was designated shogun (generalissimo) with the actual administration of the islands under his control. Clans came and went, but a dual government system—shogun and emperor—persisted till 1867.

First contact with the West came about 1542, when a Portuguese ship off course arrived in Japanese waters. Portuguese traders, Jesuit missionaries, and Spanish, Dutch and English traders followed. Suspicious of Christianity and Portuguese support of a local Japanese revolt, the shoguns restricted all foreigners in 1636-38 except the Dutch, who were confined to Nagasaki. Western attempts to renew trading relations failed until 1853, when Commodore Matthew Perry sailed an American fleet into Tokyo Bay with a letter from President Fillmore. A U. S. commercial treaty signed in 1859 was followed by similar pacts with Britain, France, the Netherlands and Russia, and the opening to foreign residents of the ports of Yokohama, Nagasaki and Hakodate.

Japan now quickly made the transition

from a medieval to a modern power. Feudalism was abolished and industrialization was speeded. An imperial army was established with conscription. The shogun system was abolished in 1867 by Emperor Meiji, and parliamentary government was established in 1889. After a brief war with China in 1894-95, Japan acquired Formosa (Taiwan), the Pescadores islands, and part of southern Manchuria. China also recognized the independence of Korea (Chosen), which Japan later annexed (1910).

In 1904-05 the new Japan won prestige by defeating Russia in the Russo-Japanese War, gaining the territory of southern Sakhalin (Karafuto) and Russia's port and rail rights in Manchuria. In World War I Japan, which took a negligible part in military operations, seized Germany's Pacific islands and leased areas in China. The Treaty of Versailles then awarded her a mandate over the islands.

At the Washington Conference of 1921-22, Japan agreed to respect Chinese national integrity. The series of Japanese aggressions which was to lead to the nation's downfall began in 1931 with the invasion of Manchuria. The following year, Japan set up this area as a puppet state, "Manchukuo", under Emperor Henry Pu-Yi, last of China's Manchu dynasty. From then on Japanese policy was attuned to the saber rattling of her militarists. On Nov. 25, 1936, Japan joined the Axis by signing the anti-Comintern pact. The invasion of China came the next year, and the Pearl Harbor attack was unleashed on Dec. 7, 1941.

For many months after Pearl Harbor, the Japanese Army and Navy enjoyed spectacular success, but by the end of 1942 the tide had begun to turn. Three years later the dropping of the world's first atomic bomb in combat on Hiroshima, followed by a second one on Nagasaki, knocked Japan swiftly into a surrender that already had become inevitable.

The formal surrender took place Sept. 2, 1945, aboard the battleship *Missouri* in Tokyo Bay. Southern Sakhalin and the Kurile Islands reverted to Russia, and Formosa (Taiwan) and Manchuria to China. The Pacific islands remained under U. S. occupation.

Soon after the surrender Japan began the process of democratizing its political, social and economic structure under Allied supervision. Early in 1946 the Supreme Allied Commander, General of the Army Douglas MacArthur, ordered Baron Shidehara's cabinet to carry out a series of political purges. Elections held on April 10, 1946 brought 72.1% of the electorate to the polls, and resulted in a conservative victory. A Liberal, Shigeru Yoshida, took over the premiership on May 22, but his conservative policies brought both Allied and internal dissatisfaction.

Following the Socialists' victory in the elections of April 20, 1947, Japan's first Socialist premier, Tetsu Katayama, a life-long Christian, formed a cabinet composed of Socialists, Democrats and members of the People's Cooperative Party on May 31, 1947. In July, 1947, the U. S. proposed an early conference of the eleven members of the Far Eastern Commission to consider a peace settlement for Japan. The proposal was accepted by all the member nations except the U. S. S. R., which insisted that the treaty be drafted by the four-power Council of Foreign Ministers (China replacing France), thus following the precedent set by the Italian and Axis satellite treaties. Dissension between the left and right wings of his party, however, forced Katayama's resignation on Feb. 10, 1948. He was succeeded by Hitoshi Ashida, a Democrat leader, on Feb. 21.

ALLIED OCCUPATION GOVERNMENT. General MacArthur was appointed Supreme Commander for the Allied Powers (SCAP) on Aug. 14, 1945. The surrender terms provided that Japan must accept the provisions of the Potsdam Declaration (July 26, 1945) and that "the authority of the Emperor and the Japanese Government to rule the state shall be subject to SCAP, who shall take such steps as he deems proper to effectuate the surrender terms."

The Far Eastern Commission—composed of Australian, Canadian, Chinese, British, French, Indian, Dutch, New Zealand, Philippine, Soviet and U. S. delegates—is empowered to formulate the policies, principles and standards by which the fulfillment of Japanese obligations under the surrender terms may be accomplished, and to review directives issued to SCAP or any action taken by SCAP within the purview of the Commission's jurisdiction. The Allied Council for Japan—composed of SCAP, who is the U. S. member, a Chinese and a Soviet member and a member representing jointly the United Kingdom, Australia, New Zealand and India—advises and consults with SCAP in carrying out the surrender terms and policies approved by the Commission.

RULER. Emperor Hirohito, born April 29, 1901, succeeded his father, Yoshihito, on Dec. 25, 1926. He was married on Jan. 26, 1924, to Princess Nagako, born in 1903. To them were born two sons, Crown Prince Akihito (Dec. 23, 1933) and Prince Masahito (Nov. 28, 1935), and 5 daughters. Succession is in the male line only.

NATIONAL GOVERNMENT. The new constitution, effective May 3, 1947, made drastic changes in Japan's political system. The Emperor retains only ceremonial functions, and executive power is vested in the cabinet, headed by the premier and collectively responsible to the Diet. Law-making power is vested solely in the Diet, composed of

two houses—the House of Representatives, popularly elected for four-year terms, and the House of Councillors, with 250 members elected for six-year terms. A bill of rights guarantees certain basic liberties. Women are enfranchised for the first time. Sovereignty, formerly vested in the Emperor, now is vested in the people, and the House of Representatives can override the veto of the House of Councillors by a two-thirds vote.

The April 1947 elections distributed the 466 seats in the House of Representatives as follows: Socialists 143, Liberals 133, Democrats (former Progressives) 126, People's Cooperative Party 31, Independents 29 and Communists 4.

On July 5, 1948 the Diet concluded a record 209-day session in which a new budget was adopted and a new exchange rate effected: 207 yen to one American dollar.

DEFENSE. The War, Navy, and Munitions Ministries and the Army and Navy General Staffs have been abolished, and the army and navy are completely demobilized. The few remaining major ships in the navy were sunk, and the smaller ships divided among the Allies. The new constitution contains a renunciation of the right to maintain armed forces.

EDUCATION. In 1944-45 Japan had 34,610 primary schools with 15,530,272 students; 4,175 secondary, middle and vocational schools with 2,276,227 students; 493 normal and "higher" schools and colleges with 327,363 students; and 49 universities with 64,478 students. The educational system was virtually at a standstill at the time of the surrender, and prompt action was taken by occupation authorities to rehabilitate it and purge the curriculum and teaching staff of militaristic and chauvinistic influences. In 1947, about 19,000,000 students were attending 40,000 schools of all levels.

POPULATION. The population of Japan proper was approximately doubled from 1870 to 1935. Density of population is exceeded only by England and Wales, the Netherlands, Belgium and Java. The home islands are now more overcrowded than ever. As of Mar. 1, 1948, SCAP reported that 5,841,699 Japanese civilians and military personnel had been repatriated from all areas. In Aug., 1948, 561,336 still awaited repatriation from Soviet-controlled areas.

AGRICULTURE. Japan is a land of small rice and silk farms and, except in Hokkaido, the northernmost island, there is almost no large-scale farming and animal husbandry. The average holding is less than three acres. Double cropping makes self-sufficiency possible, but on a very low level of subsistence. Crop production in 1948, hampered by shortages of fertilizer, was considerably below prewar figures, and food deficits were still critical.

MAJOR AGRICULTURAL CROPS, 1946-47 (Preliminary estimate)

Crop	Acres	Tons
Rice	7,350,000*	9,800,000
Barley	2,100,000*	817,000
Wheat	1,527,000†	659,000
Potatoes	520,000†	1,675,000
Fruit	367,000*	922,000

*1945. †1946.

Japan is the world's largest producer of natural silk, with about 30 percent of all farm households engaged in cocoon tending in 1939. Output for 1946 was 75,306 tons.

INDUSTRY. Japan's light as well as heavy industries continued to operate below basic requirements in 1947-48, largely because of labor troubles and deterioration of equipment. Monthly production of cotton yarn in March, 1948, was only 10,500 tons, as compared with 34,600 in 1940. Monthly steel ingot and casting production in April 1948 was about 119,000 tons as against 571,000 in 1940; production of pig iron, 45,000 in March 1948, as against 290,000. The metallurgical and textile industries ordinarily are the largest in Japan, followed by machinery, chemicals and food. The cottage industry is prominent in spinning and weaving of silk and cotton and in the manufacture of bicycle parts.

After 1931 a considerable expansion took place in the heavy industries—metal, machine-building and chemical—which were adaptable to war purposes. State control was intensified at the same time.

Directives issued in 1945 have effected the dissolution of huge interlocking monopolies (*Zaibatsu*) in business and finance; approximately 1,200 firms were involved. A directive issued Aug. 24, 1946, ordered the seizure for reparations of 505 of the largest industrial plants, mostly privately-owned, which accounted for 95 percent of the Japanese pig iron output, 88 percent of the steel ingots, 50 percent of machine tools and 87 percent of shipbuilding facilities. Shipbuilding capacity was to be reduced to 650,000 gross tons annually (from 1,900,000 tons), steel ingots to 3,500,000 metric tons (from 12,000,000 tons), pig iron to 2,000,000 tons (3,000,000 tons in 1939) and sulfuric acid to 3,930,000 tons. Government-owned arms plants and naval yards were seized earlier in the year.

Removal of equipment from Japan has been delayed by Allied inability to agree on the allocation of reparations shares to the claimant countries.

TRADE. Before World War II, Japan ranked fifth in world trade. Exports in 1939 totaled \$928,533,000, and imports \$757,775,000. Foreign trade was resumed on a small scale under strict Allied control in 1946, and in 1947 a program of limited

private trade was initiated under which exports for the year amounted to \$173,568,000 and imports to \$525,956,000. The U. S. supplied 85 percent of the imports; most of the exports went to the Netherlands Indies, Great Britain, the U. S., Korea and Hong Kong. Imports were largely food and fertilizer. Of the exports, about 50 percent was cotton fabric, followed by cotton yarn, raw silk and coal.

COMMUNICATIONS. On Dec. 31, 1939, Japan had 4,084 ships of more than 100 tons, with an aggregate tonnage of 5,728,779. Before World War II the merchant marine carried almost 80 percent of the foreign trade and was surpassed only by those of the U. S. and Britain. War-time losses were enormous; on June 30, 1947, there were only 763 vessels of more than 100 tons, with a total tonnage of 1,300,000.

Railway mileage in 1946 was 16,993. The highway system totaled 534,424 miles.

FINANCE. World War II left Japan with a staggering public debt, mounting inflation and a disorganized financial system. The 1947-48 general account budget totaled 114,503,000,000 yen, of which occupation costs amounted to 27,000,000,000 yen. The national debt totaled 365,640,000,000 yen on May 31, 1948.

On May 15, 1948, the Cabinet decided to suspend war bond interest payments for one year starting July 1, so that 2.7 billion yen (\$54 million) could be applied to reconstruction and relief for repatriates. A 5-year plan aimed at bringing exports and imports into balance by 1952 was announced on May 17. An agreement was signed in Washington on May 14, in which it was decided to lend Japan \$60 million to be used as a revolving fund for imports through the U. S. Army.

MINERALS. Japan is relatively poor in minerals. Crude oil production in 1946 in Japan proper was 1,275,000 barrels, about one-third of current domestic requirements. With coal production estimated at only 28,000,000 tons (80% of minimum requirements) in 1947, the nation was confronted with an acute fuel shortage. Other minerals include lead, silver, gold and copper.

FORESTS. Japan is well-wooded, with about 60,000,000 acres of forest. Among forest products are bamboo, charcoal and timber. The wood pulp industry of Japan proper reached an output of 845,000 tons in 1941; in 1945 it fell to 178,000 tons. In 1947, 99,615 short tons of newsprint, 6,256,464,000 bd. ft. of logs and 3,312,408,000 bd. ft. of lumber were produced.

FISHERIES. Fishing, one of Japan's biggest industries, provides a staple food and considerable exports in normal years. The prewar fishing fleet of 356,482 vessels ranged from Alaska to the South Seas. The 1946 catch approached 2,400,000 tons.

TOPOGRAPHY. Japan's four main islands are Honshu, Hokkaido, Kyushu and Shikoku. The Ryukyu chain to the southwest is U. S. occupied and the Kuriles to the northeast are Russian occupied. The surface of the main islands consists largely of mountains separated by narrow valleys. There are about 50 more or less active volcanoes, including famous Fujiyama near Tokyo (12,385 ft.). Earthquakes are frequent. Japan has many rivers, broken by shallows and rapids, and navigable usually for flat-bottomed boats.

CLIMATE. The Japanese climate ranges from subtropical in its southern extremes, to winter cold and snow in Hokkaido. The winter temperatures are moderated in the central islands by the Japan Current. Mean annual temperature in Tokyo is 56°.

Korea (Chosen)

Area: 85,225 square miles.

Population (est. 1940): 24,326,327 (Korean except 633,320 Japanese* and 49,815 non-Japanese foreigners, mostly Chinese).

Density per square mile: 285.4.

Premier: Lee Bum Suk.

President: Dr. Syngman Rhee.

Occupation Commanders: Col. Gen. T. F. Shitikov (Soviet); Maj. Gen. John B. Coulter (U. S. A.).

Principal cities (census 1940): Seoul (Keijo), 935,464 (capital; U. S. zone headquarters); Pyongyang (Heijo), 285,965 (Soviet zone headquarters); Fusan, 249,734 (chief seaport); Seishin, 197,918 (seaport; rail center); Taikyu, 178,923 (silk center).

Monetary unit: Won.

Languages: Korean, Chinese, Japanese.

Religions: Buddhist, Confucianist, Taoist, Christian (500,300 Christians in 1938).

*1938; now largely evacuated to Japan.

HISTORY. Korea, a peninsula about 600 miles long extending out from Asia between the Yellow Sea and the Sea of Japan, is about the size of Minnesota. Over the centuries it belonged sometimes to China, sometimes to Japan. It emerged from World War II under Soviet and U. S. occupation but with the promise of independence "in due course."

According to legend which may be partly historical, a Chinese sage named Kija founded the kingdom of Chosun ("Morning Calm") in 1122 B.C. and thus began a dynasty which lasted until 193 B.C. In 108 B.C. Korea was annexed to China, and later divided into three small principalities which formed the kingdom of Silla. Silla revolted in A.D. 918 and declared its independence. In 1592 the Koreans defeated a Japanese fleet and, with Chinese help, ousted the Japanese invaders from their land. In 1627, the Manchus seized Korea and placed it again under Chinese sovereignty. In the Chinese-Japanese War of

1894-95, Japan won predominant influence in Korea, and in 1905 reduced it to a protectorate. In 1910 Japan formally annexed Korea. A Korean bid for independence was crushed ruthlessly in 1919.

In Aug., 1945, at the end of World War II, Korea was occupied by Soviet and U. S. troops. The United States, United Kingdom and Soviet Union agreed at Moscow in Dec., 1945, that Korea should be placed under the trusteeship of those three powers and China for a period not to exceed five years and that, as the first step toward Korean independence, the U.S. and Soviet commanders should meet as soon as possible to agree upon the formation of an all-Korean provisional government. Agreement proved to be impossible. The U. S. referred the matter to the U. N. General Assembly, which set up a commission in November, 1947, to arrange for Korean elections and to aid in the formation of a government. The U.S.S.R. boycotted the commission's meetings, but elections were held for a national assembly in the U. S. zone on May 10, 1948, with seats left vacant for Soviet zone delegates. The assembly met for the first time on May 31, and on July 12 adopted a constitution setting up a one-house National Assembly with a government headed by a president. On July 20 Dr. Syngman Rhee was elected president by the Assembly, and on Aug. 12 the new Republic was recognized by the U. S. and China. Meanwhile, on May 1, Soviet forces had set up a "People's Republic" which claimed jurisdiction over both zones.

The long subjugated Koreans received little experience in self-government under Japan and today are split into many political factions.

The U. S. zone of occupation, south of the 38th parallel, has about 43 percent of the area with 19,370,000 population, and is controlled by 50,000 troops. The Soviet zone, occupied by about 200,000 troops, has been developed into a typical Communist state.

SOCIAL AND ECONOMIC CONDITIONS. In 1947, there were 2,177,980 pupils in elementary schools, 158,325 in secondary schools, and 13,417 in higher schools. Less than half the population of school age (6 to 12) was in school in that year. There is a university at Seoul.

The Korean population is more or less homogeneous and successfully withstood Japanese efforts to assimilate it.

Korea, predominantly agricultural, cultivates about 12,000,000 acres. Chief products are rice, barley, oats, rye, millet, soybeans, tobacco, cotton and wheat. The 1946 rice crop in south Korea was 1,849,535 metric tons, 18 percent below average wartime production.

Industrial development was speeded in the last years of Japanese rule. The lead-

ing industries by value of output ordinarily are chemical, textile, food, beverage and tobacco. The northern part of the country, in the Soviet zone, has the larger portion of Korea's industry.

Korea's prewar foreign trade was closely linked with that of Japan. Exports in 1939 were valued at \$261,394,000, of which 71.4 percent went to Japan and 20.4 percent to Manchukuo. Imports were \$360,058,000, of which 87.1 percent came from Japan and 5.8 percent from Manchukuo. The major exports were rice, fertilizer, cotton cloth, soybeans, raw silk, fish and coal. Post-war foreign trade has been mostly on a government-to-government basis, with Japan the chief source of parts and machinery for industrial rehabilitation.

Land communications, well developed by the Japanese for strategic reasons, included (1940) 2,619 miles of government railway, 1,107 miles of private railway and 17,011 miles of highway.

The 1947-48 budget estimated expenditures of the South Korean Interim Government at 17,735,151,522 won, which on Jan. 31, 1948, had been increased by supplemental appropriations to 20,691,146,910. Actual expenditures in the year 1946-47 were 10,925,176,000 won and actual revenues, 5,133,372,000.

Korea's best mining regions are in the north. Leading products are coal, gold, silver, copper, tungsten ore, iron ore, graphite, lead, alum stone and pyrite ore.

Despite Japanese exploitation, considerable Korean forest areas remain, especially in the north. Most of the fishing companies were Japanese-owned before 1945.

TOPOGRAPHY AND CLIMATE. Korea's coast, with a rugged mountain range along the east, is fringed with more than a thousand islands. Several rivers are navigable for more than a hundred miles, including the Rakuto in the south, the Kan in the central region and the Yalu in the northwest, on the Manchurian border. The climate is equable, about like that of the eastern United States. Annual rainfall is about forty inches.

Lebanon (Republic)

Area: 3,475 square miles.

Population (est. 1947): 1,200,000 (Arabian, Armenian, Circassian, Turk).

Density per square mile: 345.3.

President: Sheik Bishara el Khoury.

Prime Minister: Riyad el Solh.

Principal cities (est. 1943): Beirut, 234,000 (capital, chief port); Tripoli, 70,800 (oil pipeline terminus).

Monetary unit: Syrian-Lebanese pound (£SL).

Languages: Arabic, French.

Religions: Maronite, Greek Orthodox, Greek Catholic, Mohammedan.

HISTORY. Smaller than Connecticut, Lebanon lies at the eastern end of the mediterranean, between Palestine and Syria. In ancient times it was the mountainous hinterland of the Phoenician coast towns. From the 7th to the 11th centuries there infiltrated into southern Lebanon the heretics of Islam who finally coalesced into the Druse community.

In the 19th century the Turkish Sultanate encouraged the Druses to wage civil war against the Christian Maronites. After a massacre of 2,500 Christians in 1860, Lebanon was occupied by the French for a year. From 1864 to 1914, a Christian military government ruled the area under nominal Turkish sovereignty. After World War I, France received a League of Nations mandate over Syria and Lebanon. The French drew a Lebanese border in 1920 to offset predominantly Moslem Syria and proclaimed the area a republic under French control on May 23, 1926.

Vichy forces controlled Lebanon after the fall of France in 1940, but the Allies replaced them by July 14, 1941. Despite Syrian objections, the French permitted Lebanon to declare its complete independence on Nov. 26, 1941. Lebanon joined the Arab League and took part in the invasion of Palestine on May 15, 1948.

GOVERNMENT. The modern Lebanese republic is governed by a president elected by parliament, for a six-year term, and a cabinet of ministers appointed by the president, but responsible to parliament, which has 55 members. An independent army is being formed, based on a cadre of native *troupes spéciales*, formerly part of the French army in the Levant. The last French troops were evacuated late in 1946.

SOCIAL AND ECONOMIC CONDITIONS. In 1944-45, there were 146,703 students attending various state, Moslem, Christian, private, French, American and British schools. Beirut has two universities. Christians are in the majority in Lebanon.

Lebanon produces tobacco, olives, grapes and other fruits, wheat and silk. Manufacturing is confined mainly to local consumers' goods. The silk industry is important in Beirut and Tripoli; cocoon production averages about 6,000 tons annually. Tobacco manufacturing is a government monopoly. The only available foreign trade statistics are combined with those of Syria. Beirut, the chief port, ships out silk, fruit and carpets, and imports machinery, tin plate and textiles.

A rail line links Beirut with Damascus and Syria. Another, built in World War II by Allied engineers, runs from Tripoli to the Palestine border, and is part of a line from Cairo to Istanbul, via Haifa in Palestine. One of the oil pipelines from the Kirkuk field in Iraq terminates in Tripoli.

The 1947 budget balanced at £SL58,900.-000, with about 20 percent allocated for public works, and 20 percent for defense.

Iron ore deposits are worked in the south, and building stone and marble are plentiful. The country also has thick deposits of inferior lignite coal.

TOPOGRAPHY AND CLIMATE. The topography is varied. There is a narrow coastal plain, and the steep Lebanon Mountains reach heights of approximately 10,000 feet. There are no large streams. Lebanon has hot dry summers (about 80° in Beirut) and cool rainy winters (50°-60° in January).

Liberia (Republic)

Area: c.43,000 square miles.

Population (est. 1938): 2,500,000 (Native Negro, 99%; American Negro, .8%; white, .1%; others, .1%).

Density per square mile: c.58.1.

President: William V. S. Tubman.

Principal city: Monrovia, (est. pop. 10,000; capital and chief port).

Monetary unit: U. S. dollar.

Languages: English (official), native tongues.

Religion: Protestant Christian (official); Mohammedan, Catholic, Pagan.

HISTORY. The history of Liberia, Africa's only republic, dates from 1816, when the American Colonization Society received a charter from the U. S. Congress, authorizing it to send emancipated Negro slaves to the west African coast.

The first settlers, who were led by Jehudi Ashmun, landed in 1822 at Cape Mesurado near the present site of Monrovia. White governors, named by the society, administered Liberia until 1841. On July 26, 1847, independence was proclaimed, and the first president was Joseph J. Roberts, a Virginia octoroon of considerable ability.

After 1920 considerable progress was made toward opening Liberia's interior, but even today only about 100,000 of its inhabitants are regarded as civilized, and lack of transportation hampers development of the heavily forested inland. In 1942, a U. S.-Liberian agreement admitted U. S. troops to build strategic airports.

In 1944 an agreement was announced providing for permanent U. S. military and naval bases.

GOVERNMENT. The government is modeled after that of the United States. The president and vice president are popularly elected for eight years. The 21-member House of Representatives is elected for four years and the ten-member Senate for six years. Suffrage is extended only to landowners over 21 who are of Negro blood, but a 1946 constitutional amendment provides for the seating in the House of an aborigine from each province in the hinterland.

Liberia's army of about 4,000 men is organized on a militia basis.

SOCIAL AND ECONOMIC CONDITIONS. Education, compulsory in theory, is conducted in 201 schools, about half state and half mission. Attendance is about 16,000. There are six state high schools, a normal school, a state college and the Booker T. Washington Industrial and Agricultural Institute, supported by U. S. donations.

The English-speaking descendants of U. S. Negroes, known as Americo-Liberians, are the intellectual and ruling class. The aborigines, virtually all uncivilized, are divided into some 28 tribes speaking different dialects. Some are Moslems or pagans. Christians include Anglicans, Methodists, Catholics, Baptists and Presbyterians. There are a number of foreign missions.

Agriculture, on a crude level, is the principal means of livelihood for the tribal Liberians, who raise coffee, rice, sugar cane and cassava. Manufacturing is non-existent except for small native industry, and the country's only big enterprise is the million-acre concession granted in 1925 to the Firestone Plantations Company for rubber cultivation. Production averages 22,000 tons annually. In 1947 the Liberia Company, a joint U. S.-Liberian enterprise, was created to promote over-all industrial development.

Most of the trade is with the United States. Domestic exports in 1947 totaled \$13,092,039 of which 89% was rubber and 3.6% gold. Imports reached the record total of \$8,763,000, mostly textiles, machinery, vehicles, food and beverages and petroleum. The U. S. supplied 85% of the imports.

Liberia has no railroads. Coastwise communication is supplied by Pan American Airways. Interior travel is by foot with native bearers. In 1939 there were less than 300 miles of roads, but U. S. troops built considerably more. There are no harbors except a port and naval base completed in 1947 at Monrovia, with U. S. assistance, at a cost of more than \$19,000,000.

Finances are under U. S. supervision. The country's recent fiscal record is excellent. Actual revenue in 1947 was \$3,212,000 and actual expenditure, \$2,798,000. The external debt on Dec. 31, 1947, was \$636,000. There is no internal debt.

TOPOGRAPHY AND CLIMATE. Liberia, about the size of Ohio, has a 350-mile frontage on the west coast of Africa, between the Ivory Coast and Sierra Leone. Its only well developed area is a low coastal strip running inland about seven miles. Beyond that is a low plateau, some of it mountainous, traversed by many rivers, of which the Cavalla (Kavalli) and the St. Paul's are the most important. The climate is tropical throughout, with rainfall up to 150 inches a year on the coast.

Liechtenstein (Principality)

Area: 65 square miles.
 Population (census 1941): 11,102 (mostly German).
 Density per square mile: 171.5.
 Ruler: Prince Franz Joseph II.
 Chief of Government: Alexander Frick.
 Principal city (census 1941): Vaduz, 2,020 (capital).
 Monetary unit: Swiss franc.
 Language: German.
 Religion: Roman Catholic.

Tiny Liechtenstein lies on the east bank of the Rhine, just south of Lake Constance, between Austria and Switzerland. It abolished its army in 1868 and has managed to stay neutral and undamaged in all European wars since that date.

Founded in 1719, Liechtenstein was made up of the Lordships of Vaduz and Schellenburg, immediate fiefs of the Holy Roman Empire. In 1806 it joined the Rhine Federation and in 1815 the German Confederation. It became independent in 1866. Franz Joseph II, the reigning prince, was born in 1906, and succeeded his great uncle, Franz I, in 1938. In 1943 Franz Joseph married Countess Gina Wilczek, of Austrian nobility.

The constitution of 1921 provided for a legislature, the *Landtag*, of 15 members elected by direct, universal suffrage. Liechtenstein adopted Swiss currency in 1921, and has been part of the Swiss Customs Union since 1924. Its foreign trade statistics are included in those of Switzerland, which also administers the country's telegraph and postal service.

Wheat, wine and fruit are the chief products. There are small manufactures of cotton, leather and pottery. The country's taxes are quite painless. For many years it had no debt, but at the beginning of 1948, the debt was 4,270,894 fr. Revenue in 1948 was estimated at 3,798,800 fr. and expenditures at 4,209,046 fr. In 1942-43, there were 42 elementary schools and 20 continuation schools, with 1,701 pupils.

Liechtenstein's area includes low valley land and upland peaks—Falkais at 8,401 feet, and Naafkopf, 8,432 feet. The chief mineral product is marble.

Luxemburg (Grand Duchy)

Area: 999 square miles.
 Population (census 1947): 286,786* (Luxemburgian, French, German).
 Density per square mile: 287.0*.
 Ruler: Grand Duchess Charlotte.
 Premier: Pierre Dupong.
 Principal city (census 1947): Luxembourg, 61,590* (capital; iron and steel).
 Monetary unit: Luxembourg franc.

Languages: Luxemburgian, French, German.
 Religion: Mainly Roman Catholic.
 *Population actually present at time of census.

HISTORY. Luxemburg is a small buffer state between France, Germany and Belgium. Invaded and occupied in both World War I and II despite the fact that its neutrality was guaranteed, Luxemburg suffered most in the latter war, when the Nazis deported several thousand natives as slave labor.

Sigefrol, Count of Ardennes, an offspring of Charlemagne, was Luxemburg's first sovereign ruler. In 1060 the country came under the rule of the House of Luxemburg. From the 15th to the 18th centuries, Spain and Austria held it in turn. The Congress of Vienna in 1815 made it a Grand Duchy and gave it to William I, King of the Netherlands. In 1839 the Treaty of London ceded the western part of Luxemburg to Belgium.

After the Nazi invasion on May 10, 1940, the government fled the country, returning in 1944 after Allied troops had liberated it. A claim for 225 square miles of German territory was made in 1946.

GOVERNMENT. Luxemburg is a constitutional monarchy with the crown hereditary in the House of Nassau. The present heir to the throne is Prince Jean, born Jan. 5, 1921. The constitution of 1868, as amended in 1919, provides for democratic government through a chamber of deputies of 51 members, popularly elected for six-year terms. The constitution leaves to the sovereign the right to organize the government, which consists of a minister of state who is president of the government (premier) and at least 3 other ministers. There is also a council of state of 15 members, chosen for life by the sovereign.

SOCIAL AND ECONOMIC CONDITIONS. Education is compulsory for all children between the ages of 6 and 13. The common or idiomatic language is *letzeburgesch*. German and French are also spoken. Labor unions are strongly organized into a single large federation.

Although the soil is not very fertile, agriculture is prosperous. Principal crops are potatoes, oats, wheat, rye and grapes. Wine production in 1947 was 13,000,000 liters.

The mining and metallurgical industries, based on iron ore found in the south, are the most important. There were, in 1947, a total of 17 blast furnaces, with 16,000 workers, which produced 1,818,160 metric tons of pig iron. Production of steel ingots totaled 1,714,297 tons. Other important industries include brewing, sparkling wine, leather, textiles and cement.

Normally, Luxemburg has little unemployment, almost no illiteracy and such low taxes that many foreign holding companies

maintain legal headquarters there to escape high taxation in other countries.

By a customs union between Belgium and Luxemburg which came into force on May 1, 1922, to last for 50 years, customs frontiers between the two countries were abolished. On Jan. 1, 1948, an economic union with Belgium and the Netherlands (Benelux) came into existence. Luxemburg's foreign trade figures are included in those of Belgium and no separate statistics are available; exports consist chiefly of iron and steel products.

Transportation facilities in 1938 included 318 miles of railway and 2,644 miles of highway, 1,301 miles of which are improved.

The 1948 budget estimated revenue at 3,511,567,000 fr. and expenditures at 3,914,299,029 fr. The consolidated debt on Dec. 31, 1947, was 1,787,366,081 fr. and the floating debt 3,236,489,300 fr.

Luxemburg's prosperity depends largely on its rich iron ore mines, which produced 1,994,427 metric tons in 1947; exports amounted to 548,550 tons.

Mexico (Republic)

(República Mexicana)

Area: 758,061 square miles.

Population (est. June 30, 1948): 23,876,343 (mestizo, 55%; Indian, 29%; white, 15%; others, 1%).

Density per square mile: 31.4.

President: Miguel Alemán.

Principal cities (est. 1948): Mexico City, 1,972,351 (capital); Guadalajara, 280,131 (manufacturing and distributing center); Monterrey, 250,829 (metallic industries); Puebla, 159,383 (cotton textile center); Mérida, 113,389 (sisal).

Monetary unit: Peso.

Language: Spanish, 86%; Indian, 14%.

Religion: Predominantly Roman Catholic.

HISTORY. Mexico is four times the size of Spain, the source of its cultural heritage, and one-fourth the size of the United States, the source of its modern industrial trend. In recent times the nation has steered moderately leftward in deference to the needs of its millions of peasants.

Mexico's early history is shrouded in mystery, but at least two highly civilized races—the Mayas and later the Toltecs—preceded the wealthy Aztec empire conquered in 1519–21 by the Spanish under Hernando Cortez. Spain ruled for the next 300 years until 1810 (the date was Sept. 16 and is now celebrated as Independence Day), when the Mexicans first revolted. They continued the struggle and finally won independence in 1821 by the Treaty of Córdoba.

Turbulent years followed. From 1821 to the first presidency of Porfirio Díaz in 1877, there were two emperors, several dictators

and enough presidents and provisional executives to make a new government on the average of every nine months. Mexico lost Texas (1836), and after defeat in the war with the United States (1846–48) it lost the area comprising the present states of California, Nevada and Utah, most of Arizona and New Mexico, and parts of Wyoming and Colorado.

In 1855 the Indian patriot Benito Juárez began a series of liberal reforms including the disestablishment of the Catholic Church, which had acquired vast property. A subsequent civil war was interrupted by the French invasion of Mexico (1861), the crowning of Maximilian of Austria as emperor (1864), and then his overthrow and execution by forces under Juárez, who again became president in 1867.

During the rule of the dictator Porfirio Díaz (1877–80 and 1884–1911) the country was freed from political strife, made substantial economic progress, and gained a respected position in foreign affairs. But Díaz' reactionary land policy led to revolution and his resignation in 1911. The next few years were marked by bloody political-military strife, and trouble with the United States culminating in the punitive expedition into northern Mexico (1916–17) in unsuccessful pursuit of the bandit-politician Pancho Villa. President Venustiano Carranza, who had shown pro-German sympathy in World War I, was assassinated in 1920, and was succeeded by General Alvaro Obregón.

President Plutarco Elías Calles (1924–28) largely abandoned Obregón's reforms, and Obregón, re-elected in 1928 on a radical agrarian and anti-clerical platform, was assassinated by a religious fanatic before he could take office. There followed a series of Calles puppets who ruthlessly suppressed labor and farm organizations. General Lázaro Cárdenas (1934–40), backed by the National Revolutionary Party (PRM), began a socialistic program of land distribution to peasants, government seizure of foreign-owned oil lands, and broad labor reforms. General Manuel Avila Camacho, president during World War II, cooperated closely with the United Nations and followed Cárdenas' policy at home.

In July, 1946, Miguel Alemán was elected president, backed by the Avila Camacho administration and the PRM. It was the most peaceful election in Mexican history. Alemán, like his predecessor, pursued the internal policy initiated by Cárdenas; the early part of his administration was marked by continued cordial relations with the United States. Presidents Truman and Alemán exchanged visits in each others' countries in 1947.

GOVERNMENT. The president, popularly elected for six years and ineligible to succeed himself, governs with a cabinet of

his appointed ministers. The Federal Congress has two houses—the 147-member Chamber of Deputies, elected for three years (one for each 150,000 population) and the 58-member Senate, elected for six years with two senators from each of the 28 states and two from the Federal District (Mexico City). All married male citizens at least 18, and all single male citizens at least 21 are eligible to vote.

Each of the 28 states has considerable autonomy, with a popularly-elected governor, legislature and local judiciary. The president appoints the governors of the three Federal territories, and the governing body of the Federal District.

Military service is compulsory, and the president holds supreme command of the armed forces, through the Secretary of War. The national army, greatly modernized during World War II, numbered about 57,500 men in 1947; the air force had 250 planes and two U. S.-trained squadrons. The small navy consists of six sloops, about 20 coast guard vessels and other minor craft.

EDUCATION. Illiteracy is one of Mexico's big problems, and the government is trying hard to reduce the rate, estimated at 30 percent in 1947, as against 60 percent in 1930. Education is free, compulsory from 6 to 16, separated from the church and under Federal control. There were about 25,000 primary schools in 1947 with an enrollment of 2,765,568. Secondary schools had an enrollment of about 80,000. The ten universities had 30,000 students, of which 22,230 (in 1945) attended the University of Mexico, in Mexico City.

RELIGION. About 90 percent of Mexicans are Roman Catholics, but all religions are tolerated. The 1857 Constitution separated church and state. The church cannot acquire property, and its present holdings are deemed to belong to the state. Priests, who must be Mexican-born, cannot take part in politics.

GOVERNMENT CONTROL. Federal control of the national economy is increasing steadily in Mexico. The government regulates farm production, fixes prices, and controls both exports and imports. Since 1915 it has consistently broken up large estates for distribution to the poor on state-owned communal farms. In 1941, title to the land began to pass to the peasants themselves. The right to strike, maximum hours, minimum wages and a social security system—all these have been established by the government.

AGRICULTURE. Primitive agricultural methods are steadily giving way to modern practices. More than 15 percent of the 1947 Federal budget went for irrigation projects. This brought to more than 17,000,000 acres the total of cultivated land. About 2,500,000 acres are irrigated, but

the eventual total of watered land is expected to be 12,000,000 acres. Approximately half the arable land is planted to corn—a staple item in the national diet. The Yucatán peninsula, at the southern end of the Gulf of Mexico, raises more than half of the world supply of sisal hemp. (167,000 tons in 1945). Agriculture and grazing accounted for 15 percent of the national income in 1946.

Production of principal crops has been as follows in recent years (in metric tons): corn, 2,554,296 (1947); wheat, 405,034 (1947); sugar, 494,317 (1946-47); rice, 145,464 (1945); sesame, 72,500 (1944); pineapple, 118,163 (1947); potatoes, 140,000 (1945); cotton, 92,091 (1947); bananas, 5,169,000 (bunches, 1945).

Stockraising is important on non-arable land. Mexico's inventory of livestock in 1943 showed 10,082,958 cattle, 1,887,478 horses, 721,343 mules, 2,159,734 asses, 3,673,887 sheep, 6,544,129 goats and 3,698,233 hogs. A serious epidemic of hoof-and-mouth disease broke out among Mexican cattle in 1947. A joint U. S.-Mexican campaign to destroy all diseased and exposed cattle led to peasant opposition amounting in some cases to insurrection, but the campaign continued in 1948.

INDUSTRY. Considering its cheap labor, abundant raw materials and available water power, Mexico is still industrially backward. However, steady expansion is taking place. In 1940 there were 12,624 factories or shops with 332,323 workers and a product value of \$579,137,240. Leading establishments were cotton textile mills with estimated annual production of 600,000,000 yards; sugar mills and distilleries; cigar and cigarette factories, the latter turning out 917,000,000 packs in 1945; shoe, binder, twine and soap factories; chemical works; breweries; flour, paper and coffee mills; iron and steel mills and foundries; and cement, glass and ceramic works. Between 1940 and 1946, 360 industrial corporations employing 180,000 workers were formed, and manufacturing accounted for 26 percent of the national income in 1946.

Mexico has had an adverse foreign trade balance since late 1944. Statistics, in millions of pesos, are as follows:

	1938	1946	1947
Exports	710	1,544	2,151
Imports, c.i.f.	494	2,637	3,230

Chief exports in 1946 were gold (13.6%), cotton cloth (11.8%), silver (5.9%), lead (5.1%) and raw cotton (3.7%). In 1947 the U. S. took 77% of the exports and supplied 88% of the imports. Other leading customers were Argentina, Cuba, Guatemala and Sweden. Leading imports included wheat, iron and steel products, vehicles, machinery and apparatus.

MINERALS. Mexico is one of the richest mineral countries in the world. It outranks all other countries in silver production (1947: 48,197,505 troy oz.). Other important minerals, with 1947 figures, are gold, 464,728 oz.; copper, 63,492 metric tons; lead, 223,135 metric tons; zinc, 195,814 metric tons; coal, 977,330 metric tons. A large variety of other industrial minerals are produced. The 1946 mineral value was \$196,180,000; that of petroleum was \$28,896,000. Most of the mining properties are foreign-owned, and the industry is declining in relative importance. The oil fields, lying along the east coast, were seized by the government in 1938, but later the foreign owners were indemnified. There are 17 plants and 13 refineries with daily capacity of 200,000 barrels. Production in 1947 was 56,284,146 barrels. Reserves, however, total only 900,000,000.

FORESTS. Mexican timberlands in 1945 covered 25,893,993 acres, and 1946 production included 330,564,000 bd. ft. of sawed timber (pine, mahogany, red and white cedar and primavera), 303,017,000 bd. ft. of other timber, and 278,860,400 bd. ft. of firewood. Charcoal, resins and other by-products came to 250,000 tons. Yucatán produces nearly all of the world's chicle, the juice of the sapodilla tree, used as the base of chewing gum. Chicle production in 1945-46 was 11,590 tons.

COMMUNICATIONS. Mexico has about 15,000 miles of railroads; the 1945 freight total was 26,124,510 tons, of which the nationalized lines carried more than half. There were over 36,000 miles of improved highway in 1946. Merchant ships in 1940 totaled 1,657,899 gross tons. Veracruz and Tampico, on the Gulf of Mexico, are the most important ports. In 1946 Mexico had 36 airline companies covering 55,816 miles.

The national debt on Dec. 31, 1946, was 2,535,000,000 pesos. The 1947 national budget was \$247,974,515, of which about two-thirds was devoted to agriculture, education, national defense and communications. U. S. direct investments in 1940 were \$357,927,000; British investments on Dec. 31, 1947, were £140,685,083. The national income in 1946 was \$2,677,108,000.

TOPOGRAPHY. Mexico is a great, high plateau, open to the north, with mountain chains on east and west and with ocean-front lowlands lying outside of them. It has two big spears—the peninsula of Lower California which is mountainous, and the Yucatán peninsula, which is mostly a low plain. The eastern mountains are marked by high volcanoes, including Popocatepetl, 17,883 feet and not entirely extinct; Ixtacchuatl, 17,338 feet; and the loftiest, Orizaba, 18,696 feet. None of Mexico's many short streams is navigable to any major extent.

CLIMATE. Partly in the torrid and partly in the north temperate zone, Mexico has three distinct climate regions. From the coasts inland to the plateau it is tropical, with temperatures sometimes topping 100°, but averaging from 77° to 82°. The plateau is sub-tropical with an average of 75°, and the mountains, over 6,000 feet, average 60°. On the east coast the annual rainfall sometimes reaches 100 inches, while in Lower California rain hardly ever falls. Rainfall on the plateau is 20 to 40 inches a year, comparable to that of the west central United States. In Mexico City the coldest months are December and January (about 55°); the warmest, April and May (65°). The wet season is from April to September.

Monaco (Principality)

Area: .59 square mile (375 acres).

Population (census 1946): 19,242.

Density per square mile: 32,613.6.

Ruler: Prince Louis II.

Principal cities (census 1946): Monaco, 1,854; La Condamine, 9,421; Monte Carlo, 7,967.

Monetary unit: French franc.

Language: French.

Religion: Roman Catholic.

A tiny, hilly wedge driven into the French Mediterranean coast nine miles east of Nice, Monaco is a little land of pleasure with a prewar tourist business that ran to 1,500,000 visitors a year. The home of world-famous Monte Carlo, a place of benign sun and balmy air, Monaco offers golf, tennis and bathing by day, and drinking, dining and gambling by night. Residents of Monaco are forbidden to enter the gaming rooms, but they have compensations. They pay no taxes, and most of them make good livings from the thriving tourist business, which was in full sway again in 1948.

Monaco, with its beautiful terraced hills and crags, had popular gaming tables as early as 1856. Five years later, a 50-year concession to operate the games was granted to François Blanc, of Bad Homburg. This concession passed into the hands of a private company in 1898. Government expenses are paid from the resultant revenue. The concession's annual license fee since 1936 has been £100,000.

The Phoenicians, and after them the Greeks, had a temple on the Monacan headland honoring Heracles. From *Monoi-kos*, the Greek surname for this mythological strong man, the principality took its name. After being independent for 800 years, Monaco was annexed to France in 1793 by the French Revolutionists, and was placed under Sardinia's protection in 1815. In 1861, it went under French guardianship, but kept its independence.

Prince Albert of Monaco gave the principality a constitution in 1911, creating a national council of 21 members popularly elected for four years. The government is under a ministry, acting on the prince's authority. The heiress to the throne, Princess Charlotte, renounced her claim in 1944 in favor of her son, Prince Renier, born in 1923. Prince Louis II (born July 12, 1870) married Ghislain Dommanges, a naturalized Monacan, in 1946.

Morocco (Protectorate) (Maroc)

Area: 161,691 square miles (French 153,870; Spanish 7,589; Tangier 232).

Population: French Morocco 8,617,000 (1947); Spanish Morocco 1,082,009 (1948); Tangier 103,000 (1947).

Sultan: Sidi Mohammed ben Youssef.

French Resident General: Alphonse Juin.

Spanish High Commissioner: Juan Varela.

Administrator of Tangier: Jonkheer van Vredenburg (Netherlands).

Principal cities (est. 1947): Casablanca, 550,000 (chief seaport); Marrakech, 238,000 (trading center); Fez, 200,000 (commercial center); Rabat, 160,000 (French administrative center).

Monetary units: French franc, Spanish peseta.

Languages: Arabic, French, Spanish.

Religions: Chiefly Mohammedan.

HISTORY. Morocco, about the size of California, is just south of Spain across the Strait of Gibraltar and looks out on the Atlantic from the northwest shoulder of Africa. It was once the home of the Berbers, who helped the Arabs invade Spain in A.D. 711 and then revolted against them and gradually won control of large areas of Spain for a time after 739.

The country was ruled successively by various native dynasties and maintained regular commercial relations with Europe, even during the 17th and 18th centuries when it was the headquarters of the famous Sallu pirates. In the 19th century, clashes with the French and Spanish became frequent. Finally, in 1904, France and Spain divided Morocco into zones of French and Spanish influence, and these were established as formal protectorates in 1912. In the same year a revolt at Fez was followed by the appointment of General (later Marshal) Louis Lyautey as governor general. His administration, lasting until 1925 except for a brief period during World War I, was remarkable for its efficiency and far-sighted policies.

Meanwhile, Morocco had become the object of big-power rivalry, which almost led to a European war in 1905 when Germany attempted to gain a foothold in the rich mineral country. By terms of the Algeiras Conference (1906), Morocco was internationalized economically and France's

privileges were limited. War again seemed imminent in 1911, when Germany dispatched a warship to Agadir in an evident attempt to intimidate France. Again the dispute was settled, however, and this time Germany recognized France's right to establish a protectorate over Morocco.

The Tangier Statute, concluded by Britain, France and Spain in 1923, created an international zone at the port of Tangier, permanently neutralized and demilitarized. In World War II Spain occupied the zone, ostensibly to insure order, but was forced to withdraw in 1945, and the international rule was re-established.

The French zone in Morocco was under the Vichy government of France during part of World War II, but three days after the Allied landing in North Africa in 1942 it came under Allied control.

GOVERNMENT. Morocco nominally is an absolute monarchy under a sultan, but actually the French resident general at Rabat and the Spanish high commissioner at Tetuan direct Moroccan policies to a large extent. The sultan lives in the French zone, and delegates authority to representatives in the Spanish zone and Tangier.

Tangier is governed by an international administration and a council of control composed of the consuls general of the signatories to the Act of Algeiras.

SOCIAL AND ECONOMIC CONDITIONS. Most of the natives are illiterate; some get rudimentary education in Koranic schools or state-maintained institutions. Education is provided in both zones for Europeans.

The natives are Berbers, roughly divided by customs and way of life into three groups—the Riff group along the coast, the central or Berber group in the mid-Atlas Mountains, and the southern or Chleuh in the high Atlas and the Sus. There is a large Jewish population. Most of the Europeans live in the cities.

Morocco is essentially agricultural. In the French zone, about 25,000,000 acres are arable, with 1947 production of wheat coming to 630,990 metric tons; of barley, 1,214,930 tons. Corn, beans, peas, hemp, sorghum, citrus fruit and dates also are raised. The olive oil yield in 1947 was 70,000 tons. In 1947, 7,423,000 sheep and 1,326,000 cattle were registered.

In the Spanish zone, agriculture is largely undeveloped, but it has potential importance. In 1947, 38,668 metric tons of barley were produced; wheat, maize and sorghum crops are also important.

Manufacturing industries introduced by Europeans, mostly small, produce chemicals, flour, leather, stone, beverages and textiles. Native industries include carpet weaving and making Turkish slippers.

Exports from the French zone in 1946 totaled 18,309,000,000 fr., and imports 33,-

338,000,000 fr. Chief exports are phosphates, wheat, fish, wool and eggs. Imports include sugar, mineral oil, cotton and rayon cloth and machinery. Exports from the Spanish zone in 1947 totaled 168,174,275 pesetas, and imports 526,228,484 pesetas. A large proportion of the trade is carried on with Spain. Major exports are cattle, eggs and iron ore; imports include flour, sugar, tea, wine and textiles. Tangier's exports in 1946 totaled 486,700,000 fr., and imports were 3,561,000,000 fr.

Railroads in 1946 totaled 860 miles of standard gauge in the French zone and 73 in the Spanish zone. Highway mileage in 1940 was approximately 5,000 in the French zone, about 600 in the Spanish zone and 65 in Tangier. Casablanca, which handles 80 percent of the French zone trade, has perhaps the world's largest artificial port.

The importance of Tangier, once Morocco's first port, has declined under the international regime, and its harbor works are obsolete.

Revenues in the French zone in 1948 were estimated at 22,482,851,000 fr.; expenditures at 22,482,783,000 fr. The budget for the Spanish zone in 1948 balanced at 214,723,-715 pesetas. The 1948 ordinary budget of the international administration at Tangier provided for receipts of 583,381,000 fr. and expenditures of 561,479,000 fr.; the extraordinary budget balanced at 289,150,-000 fr. Custom receipts provide most of the revenue.

Exploitation of French Morocco's almost inexhaustible deposits of phosphate is a state monopoly and produced a total of 2,961,000 metric tons in 1947. Other major minerals are coal, cobalt, iron ore, manganese ore, molybdenum, tin, zinc and lead. Iron ore (1947: 861,000 metric tons) is the chief mineral of the Spanish zone; others are antimony and manganese.

Cork, gums and tannins are the principal forest products in the French zone, mostly from the northern Atlas slopes; in the Spanish zone, cork, wax and charcoal are leading products. Waters off both coasts provide rich fisheries.

TOPOGRAPHY AND CLIMATE. On the Atlantic coast, there is a fertile plain; the Mediterranean coast is mountainous, making most of the Spanish zone a rugged area. The Atlas Mountains, running northeastward from the south to the Algerian frontier, average 11,000 feet in elevation.

Morocco's climate is essentially Mediterranean, modified by the Atlantic. On the Atlantic coast the temperatures are relatively cool (at Mogador, 61.5° in January and 72.3° in August). Inland the climate is more continental, with colder winters and hotter summers (at Fez, 50° in January and 80.6° in August). The rainy season is in October-November and April-May. Snow falls at altitudes above 3,000 feet.

Nepal (Military Oligarchy)

Area: c.54,000 square miles.

Population (est. 1938): 5,600,000 (Gurkha [predominant], Magar, Gurung, Bhotia [Tibetan], Newar).

Density per square mile: c.103.7.

Ruler: Tribhubana Bir Bikram.

Prime Minister: Chandra Shumshere Jung Bahadur Rana.

Principal city and capital: Katmandu (estimated population, 108,800).

Monetary unit: Nepalese rupee.

Languages: Parbatia, Gubhajiis, Tibetan.

Religions: Hinduism, Buddhism.

HISTORY. A landlocked country about the size of Iowa, lying between the Dominion of India and Tibet, Nepal has two great distinctions. It contains Mt. Everest, 29,002 feet high, the tallest measured mountain in the world. And it produces some of the toughest fighting men in the world—the Gurkhas.

Led by Rajah Prithwi Narayana, the Gurkhas invaded Nepal from India in 1768 and conquered it. A commercial treaty was signed with Britain in 1792, and in 1816, after more than a year's hostilities, the Nepalese agreed to allow British residents to live in Katmandu, the capital. In 1923 Britain recognized the absolute independence of Nepal. The United States and Nepal signed a treaty of friendship and trade on April 25, 1947. Plans for extensive social and political reforms were announced in the same year.

Nepalese troops assisted the British during the Indian Mutiny, the Tibet War of 1904, World War I, the Afghan hostilities of 1919, and World War II.

GOVERNMENT. Theoretically, the king is supreme, but real power is invested in the prime minister, nominated by special rules from among the royal family, whose members are Hindu Rajputs. Under the prime minister is a council consisting of members of the ruling family, the military, the high priests and other high officials. The predominant Gurkhas are essentially a military caste. The army numbers about 20,000 regulars and 25,000 reserves. More than 100,000 Gurkha volunteers fought with the Indian Army in the Burma campaign of World War II.

ECONOMIC CONDITIONS. Cultivated and irrigated where possible, the main valley of Nepal grows rice, wheat, pulse, fruits, vegetables, spices, sugar cane and potatoes. A few sheep and cattle are grazed. Manufacturing is limited to native handicraft, but jute and textile mills are being established. Trade with India and Pakistan passes through various frontier stations, and there are two mountain trade routes to Tibet.

Main exports include hides, skins, opium, gums, resins, dyes, jute, wheat, pulse, rice,

spices and timber. Two railroads enter Nepal for short distances—one from Raxaul, India, to Amlekhganj, the other from Jayauagar to Bijulpura. Transportation is for the most part difficult, and motorable roads are almost non-existent.

TOPOGRAPHY, RESOURCES AND CLIMATE. Along its southern border, Nepal has a strip of level land which is partly forested, partly cultivated. North of that is the slope of the Himalayan Range, including Mt. Everest and many peaks higher than 20,000 feet. Mineral resources, nearly all unexploited, include lignite, copper, zinc, lead, sulfur, marble and iron. Southern Nepal has valuable forests which yield gum, timber, resin and dye. Hemp plants grow wild. Mean temperature is 60°, with the hot season from April to June. Most of the rainfall (average 60 in. annually) occurs from June to October.

Netherlands (Kingdom)

(Koninkrijk der Nederlanden)

Area: 13,440 square miles.

Population (census 1947): 9,714,057* (practically all Dutch).

Density per square mile: 722.8*.

Sovereign: Queen Juliana.

Prime Minister: Willem Drees.

Principal cities (census 1947)*: Amsterdam, 813,984 (capital, financial center); Rotterdam, 653,078 (chief port); The Hague ('s-Gravenhage), 542,078 (seat of government); Utrecht, 187,269 (railway center); Haarlem, 158,710 (tulip center).

Monetary unit: Guilder.

Language: Dutch.

Religions (1930): Catholic, 36.4%; Dutch Reformed, 34.2%; other Protestant, 11.0%; Jewish, 1.4%; others and no creed, 17%.

*Provisional figures.

HISTORY. The Netherlands is small, half again as large as Massachusetts, but it is densely settled, is a major colonial power, and was eighth from the top in world trade at the start of World War II. Occupied by the Nazis until May, 1945, the Netherlands emerged with a fairly well salvaged economy and a less than average degree of the political chaos that gripped Europe. The thorny problem of the postwar organization of the Netherlands Indies remained unsettled in 1948.

Julius Caesar, the Roman, found the low-lying Netherlands inhabited by Germanic tribes, the Nervii, Frisii and Batavi. The Batavi on the Roman frontier did not submit to Rome's rule until 13 B.C., and then only as allies. A part of Charlemagne's empire in the 8th century A.D., the area later passed into the hands of Burgundy and the Austrian Hapsburgs and finally in the 16th century came under Spanish rule.

When Philip II of Spain suppressed political liberties and the growing Protestant movement in the Netherlands, a revolt led by William of Orange broke out in 1568. Under the Union of Utrecht in 1579, the seven northern provinces became the Republic of the United Netherlands.

The Dutch East India Company had been established in 1602, and by the end of the 17th century Holland was one of the great sea and colonial powers of Europe. In 1689 William III of Orange and his wife, Mary, the elder daughter of James II of England, became King and Queen of England. The power of the republic declined in the 18th century during the wars with Spain and France, and in 1795 French troops ousted William V.

Following Napoleon's defeat, the United Netherlands and Belgium became the "Kingdom of the United Netherlands" under William I, son of William V and head of the House of Orange. The Belgians withdrew from the union in 1830, forming their own kingdom. William I abdicated in favor of William II in 1840; the latter was largely responsible for the promulgation of a liberal constitution in 1848.

The Netherlands continued to prosper during the long reign of William III from 1849 to 1890. The male line of the House of Nassau became extinct with his death in 1890 and he was succeeded by his 10-year-old daughter, Wilhelmina, who was crowned Queen in 1898.

Neutrality was maintained during World War I, but overseas trade suffered heavily from the Allied blockade and German submarine warfare.

The prime minister from 1933 to 1939, except for brief intermissions, was Dr. Hendrick Colijn, leader of the Protestant Anti-Revolutionary Party. At the outbreak of World War II neutrality was proclaimed, but German troops invaded the country May 10, 1940, and by May 15, Dutch forces were ordered to lay down their arms. Queen Wilhelmina and Crown Princess Juliana fled to London, where a government-in-exile was established under Prime Minister P. S. Gerbrandy.

The German Army in the Netherlands capitulated May 5, 1945, and on May 23, the Dutch cabinet met once more in The Hague and tendered its resignation to Queen Wilhelmina. A new cabinet was formed on June 23 under Professor Willem Schermerhorn, a resistance leader and head of the Labor party. The Catholic party obtained a plurality in the May, 1946 elections and its leader, Dr. Louis J. M. Beel, set up a Labor-Catholic cabinet on July 3.

In parliamentary elections held July 7, 1948 (made necessary by consideration of constitutional questions dealing with Indonesia), the Catholic party retained its

plurality but Dr. Beel was unable to form a new cabinet and on Aug. 2 Labor leader Willem Drees formed a new coalition government.

Queen Wilhelmina abdicated after her fiftieth anniversary as ruler on Sept. 6, 1948, and was succeeded by Juliana, of Orange and Nassau, her only child, who took her oath as Queen of the Netherlands in a brilliant ceremony in the Nieuwe Kerk (500-year-old church) in Amsterdam.

GOVERNMENT. Queen Juliana, born April 30, 1909, was married on Jan. 7, 1937 to Prince Bernhard of Lippe-Biesterfeld (born in 1911). They have four daughters: Beatrix, the heiress apparent, (born 1938); Irene (born 1939); Margriet Francisca (born 1943), and Maria Christina (born 1947).

The Netherlands is a constitutional and hereditary monarchy, with female succession taking place only in default of male heirs. Executive power is vested exclusively in the sovereign, while legislative power rests with the sovereign and the States-General (Parliament). The upper chamber of Parliament, with 50 members, is elected for 6 years by the provincial states. The lower chamber, which shares with the government the privilege of initiating new bills and proposing amendments, consists of 100 deputies who are elected directly for four years and retire *en bloc*. Executive power is exercised in part by responsible ministers, headed by the prime minister and holding office at the pleasure of the sovereign. Suffrage is universal for all Dutch subjects of 25 years of age. The party standing in the lower chamber (elections of July, 1948) is as follows: Catholic 32, Labor 27, Anti-Revolutionary 13, Communist 8, Christian Historical Union 9, others 11.

Each of the eleven provinces has a local representative body—a Provincial State—presided over by a royal commissioner. The State collects local taxes, and legislates on local matters. Routine administrative work of the province is carried on by a group of six members called the Deputed States. Each of the 1,054 communes has a locally elected council and a mayor appointed by the crown.

DEFENSE. Military service is compulsory. The army had about 175,000 men in 1947, and the air force 275 planes. More than 60,000 men (including 40,000 mixed Dutch, Eurasian and Indonesian troops) were on duty in the Netherlands Indies during 1948. The navy (Dec. 31, 1946) had an escort carrier, two light cruisers (two more under construction), six destroyers, seven submarines, and other smaller craft. In eventual naval personnel strength of 10,000 was contemplated. Bases are maintained in the Netherlands Indies and the Caribbean, as well as in the homeland.

EDUCATION. In 1945, elementary schools numbering 7,845 (of which more than 5,000 were private) had a total enrollment of 1,311,798; 291 secondary schools had 84,135 students in 1946. The six universities and four *hogescholen* (vocational colleges) had 23,827 students in 1947. The four public universities are at Leyden, Utrecht, Groningen and Amsterdam; the two voluntary universities are the Calvinist University of Amsterdam and the Roman Catholic University of Nijmegen. Education is compulsory from the ages of 7 to 13.

RELIGION. The royal family and a large number of the inhabitants belong to the Dutch Reformed Church (Protestant), but there is complete religious freedom. Appropriations from the national budget are made for support of the Protestant, Roman Catholic, Jewish and Jansenist Churches. The Roman Catholic element is strongest in the southern provinces of Limburg and North Brabant.

AGRICULTURE. Of the total area, approximately 2,600,000 acres are arable, 3,000,000 meadowland, 170,000 devoted to horticulture, arboriculture and fruit gardens, and 630,000 forested. Dutch farms are characteristically small, with only a few larger than 250 acres. Wheat (194,089 metric tons in 1947), barley (178,914), rye (317,678), oats and sugar beets are grown, but dairying is the most important branch of agriculture. Production of milk, butter and eggs is under state control. Large quantities of vegetables and fruits are raised for export. Almost as important as the dairy industry is the raising of tulip, hyacinth and other flower bulbs in the area around Haarlem.

INDUSTRY. The Netherlands is a highly industrialized nation, utilizing both overseas raw materials and domestic agricultural products. The textile industry had 50,374 workers and output valued at \$102,622,040 in 1938, followed by the clothing industry, 38,242 workers and output of \$62,612,894; food, 7,184 workers and output of \$45,000,663; paper, 6,296 workers and output of \$20,787,351. The Netherlands ranks fifth among the world's shipbuilding nations, with 116 vessels of 216,629 tons under construction on June 30, 1948. Amsterdam is one of the world's leading diamond-cutting centers.

TRADE. The adverse balance of trade has increased markedly since the end of World War II. Trade statistics, in millions of guilders (excluding parcel post, specie and diamonds) are as follows:

	1938	1946	1947
Exports	1,039.1	784.8	1,859.3
Imports	1,414.7	2,145.0	4,252.5

Principal customers in 1947 were Belgium (15.7%), Great Britain (12.9%), France (7.3%), Netherlands Indies (7.2%)

and the U. S. (2.7%). Leading suppliers were the U. S. (28.1%), Belgium (12.3%), Great Britain (9.6%), Netherlands Indies (4.7%) and France (4.6%). The chief exports were farm, dairy, meat and fish products (45.8%), metal products, cars and ships (19.9%) and textiles. Leading imports were coal, oil and other minerals, fertilizers and food.

Dislocation of foreign commerce caused by the loss of trade from the once highly industrialized German hinterland and from Indonesia continued to be the most difficult Dutch economic problem.

COMMUNICATIONS. The merchant marine, which suffered heavy war losses, had 977 sea-going vessels of 2,638,268 gross tons on July 1, 1948—the fourth largest in the world. An extensive network of rivers expanded by many canals has led to extensive development of inland shipping. The length of navigable canals and rivers is almost 5,000 miles. River ships and barges numbered 16,736 on Jan. 1, 1948, with an aggregate deadweight tonnage of 3,850,969. In 1947, 34,600,000 tons of freight were carried on rivers and canals. The wealth of water transport has obviated the need for wide railway development. In 1947 there were 1,784 miles of railway, all privately owned, and 8,092 miles of highway open to traffic.

Air service is provided by Royal Dutch Airlines (KLM), which flew 40,107,045 miles on about 70 routes in 1947.

FINANCE. Ordinary expenditures for 1948-49 were estimated at 2,417,000,000 guilders, extraordinary expenditures at 1,182,000,000 guilders, and all revenue at 3,304,000,000 guilders. Principal sources of revenue are the income, turnover and wage and salary taxes. The public debt on June 30, 1947, was 22,801,000,000 guilders.

MINERALS, FORESTS AND FISHERIES. Netherlands minerals are few. The only important ones are coal (10,104,000 metric tons in 1947), lignite and salt. There also are peat swamps and about 630,000 acres of forest. The Netherlands fishing fleet made a record catch of 260,000 metric tons valued at 83,000,000 guilders in 1947. Herring—113,000 tons valued at 35,000,000 guilders—was the most important item.

TOPOGRAPHY. Part of the great plain of north and west Europe, the Netherlands has maximum dimensions of 190 by 160 miles and is low and flat except in Limburg in the southeast, where some hills rise to 300 feet. About half the country's area is below sea level, making the famous Dutch dikes a requisite to use of much land. Reclamation of land from the sea through dike-building has continued through recent times, and such land is usually very fertile.

The province of Zeeland consists mainly

of six delta islands guarding the mouth of the Schelde (Scheldt) River and the entrance to Belgium's port of Antwerp. Off the northwest coast are the sandy West Frisian Islands, lying from three to twenty miles out and stretching from the Zuider Zee to the German coast.

All drainage reaches the North Sea, and the principal rivers—Rhine, Maas (Meuse) and Schelde—have their sources outside the country. The Rhine is the most heavily used waterway in Europe, and nearly three-fourths of its 75 to 85 million tons of annual prewar traffic was handled through the Netherlands port of Rotterdam.

CLIMATE. Marsh mists, sea fogs and a humidity exceeding 80 percent mark the Netherlands climate. Winters are colder than in eastern England at the same latitude. Utrecht, roughly central in location, has a January average temperature of 34.2° and a July average of 62.6°. Average rainfall for the country is about 28 inches, with July-September the wettest period.

NETHERLANDS OVERSEAS TERRITORIES

CURACAO—Status: Autonomous part of Netherlands State.

Area: 403 square miles.

Population (est. 1944): 127,866.

Capital: Willemstad (pop. 1947: 40,597).

Governor: Pieter A. Kasteel.

Exports (1946): 512,795,997 florins. Chief export: petroleum (more than 95 percent).

Agricultural products: aloes, beans, corn.

Manufactures: refined petroleum, straw hats.

Mineral products: lime phosphate, salt.

Curacao comprises two groups of Caribbean islands 500 miles apart; one, about 40 miles off the Venezuelan coast, consists of Curacao (210 sq. mi.), Bonaire (95 sq. mi.) and Aruba (69 sq. mi.); the other, lying to the northeast, consists of 3 small islands with a total area of 29 square miles. The Dutch acquired the island of Curacao from Spain in 1634 and have held it since, except for short intervals during the Napoleonic Wars. The U. S. accepted the invitation of the Netherlands government during World War II to dispatch troops to Curacao to co-operate in its defense. Administrative officials include the governor (appointed by the crown) and an elected council.

The backbone of Curacao's economy is the refining of crude oil which comes from the adjacent Maracaibo fields in Venezuela. The refinery on Aruba, the world's largest, completed in 1945 the processing of the billionth barrel of oil since its opening in 1929. Aside from native Curaçaoans, there were in the territory 7,511 English, 5,156 Dutch and 4,213 Venezuelans in 1943. Dutch is the official language, but many inhabitants speak a patois known as Papi-

mento, a mixture of Spanish, Dutch, English, Portuguese, native and other words. Only a small part of the trade is carried on with the homeland.

The island of Curaçao has a torrid climate, with average temperatures of 79° in January and 83° in September. Rainfall is light, averaging only 16 inches annually—mostly from October to January.

SURINAM (Dutch Guiana)—Status: Autonomous part of Netherlands State.

Area: 54,291 square miles.

Population (est. 1947): 181,984*.

Capital: Paramaribo (pop. 1947: 75,233).

Governor: Willem Huender.

Foreign trade (1945): exports, 24,581,839 Surinam guilders; imports, 30,982,018 guilders. Chief export: bauxite (70%).

Agricultural products: rice (1947: 39,408 metric tons), sugar, coffee.

Minerals: bauxite (1947: 1,739,137 metric tons), gold (1947: 128,398 grams).

Forest product: balata (1947: 330 metric tons).

*Excluding aborigines, numbering about 25,000.

Surinam lies in northeastern South America between British and French Guiana. It was received by the Dutch from England at the Peace of Breda (1667) in exchange for New York and at that time included British Guiana, which was seized by England in 1803 and formally ceded to her at the conclusion of the Napoleonic Wars. The United States and Brazil accepted the invitation of the Netherlands government during World War II to cooperate in the defense of the valuable bauxite mines. The governor (appointed by the crown) is assisted by an all-native legislature and cabinet.

Mining is the most important activity, and only about 65,000 acres are devoted to agriculture. The largest bauxite mines are owned by Aluminum Company of America subsidiaries. In 1946 a company was formed to work 10,000,000 acres of the area's vast, but almost inaccessible, hardwood forests.

The heterogeneous population includes approximately 1,000 Dutch, 1,000 other Europeans, 2,400 Chinese, 19,000 Djukas (descendants of escaped slaves), 2,600 aboriginal Indians, 70,000 Negroes and mulattoes, as well as 85,000 East Indian (British India and Java) laborers brought in after the abolition of slavery in 1863 to work the sugar plantations.

From its settled coastal plain, Surinam runs back to a virtually unexplored mountain and jungle area along the Brazilian border. Rivers are the chief means of interior travel. The climate is tropical throughout but is modified by the north-easterly trade winds. Yearly range of temperature is approximately 70.5°–90°. Annual rainfall is about 90 inches on the coast.

Netherlands Indies (Part of Netherlands State)

(Nederlandsch-Indië)

Area: 735,268 square miles.

Population (est. 1942): 72,000,000 (Native except for 1,190,014 Chinese, 240,162 Europeans [208,269 Dutch], and 7,195 Japanese in 1930).

Density per square mile: 96.5.

Acting Governor General: Hubertus J. van Mook.

Principal cities (census 1930): Batavia, 435,184 (capital); Soerabaja, 341,675 (seaport, naval base); Semarang, 217,796 (seaport, central Java); Bandoeng, 166,815 (commercial center, west Java); Soerakarta, 165,484 (sugar, tobacco).

Monetary unit: Dutch guilder.

Languages: Javanese, Sundanese, Madurese, Malay, Dutch.

Religions: Mohammedan (predominant), Christian (about 2,500,000), Brahmin, Buddhist.

HISTORY. The Netherlands Indies, a group of islands with a total area more than two and a half times that of Texas, constitute one of the world's richest colonial areas. These islands—Sumatra, Java, Madura, central and southern Borneo, Celebes, western New Guinea and the Moluccas—would reach from New York to London if their extent was transposed to the Atlantic. They have great wealth in tin, rubber, spices, oil, quinine and copra. Postwar economic recovery, however, has been retarded in Java and Sumatra, by conflict between the Dutch and native nationalists, and between the latter and Communists.

During the first few centuries of the Christian era, most of the islands came under the influence of Hindu priests and traders who spread their culture and religion. Moslem invasions began in the 13th century, and most of the area was Moslem by the 15th century. Portuguese traders arrived early in the 16th century but were ousted by the Dutch about 1595. After Napoleon subjugated the Netherlands homeland in 1811, the British seized the islands but returned them to the Dutch in 1816. Political and economic reforms were introduced about 1870, and in 1903 the natives won a part in local affairs. In 1922 the islands were made an integral part of the Netherlands kingdom.

In World War II, Japanese troops began their attacks in early 1942; they took Batavia on March 5 and the big naval base at Soerabaja by March 10. Japanese military occupation with nominal native self-government continued until Aug., 1945, except in outlying parts of New Guinea and Borneo. About the time of the Japanese surrender, a self-styled Indonesian Republic headed by Achmed Soekarno sprang up and took over effective control of parts of Sumatra and Java. Allied forces, mostly

British Indian troops, moved in, and fighting between them and the nationalists continued until Nov. 15, 1946, when Dutch-native negotiations resulted in a draft agreement initialed at Linggadjati, near Cheribon. The agreement was formally signed by Dutch and Indonesian authorities on March 25, 1947.

Under this agreement there was to be formed by Jan. 1, 1949, the Netherlands-Indonesian Union, consisting on the one hand of the Netherlands, Curaçao and Surinam, and on the other of the United States of Indonesia. The latter was to be a sovereign state composed of three equal states: the Republic of Indonesia (Java, Sumatra, Madura), East Indonesia (Celebes, the Moluccas, Bali, Lombok, Dutch Timor), and other territories, such as Borneo and Dutch New Guinea, whose political status remained to be determined. The governmental structure of the United States of Indonesia was to be determined by a popularly elected Constituent Assembly. Each of the states was to control local matters.

Plans for implementing the agreement, however, remained in controversy, and fighting between the Dutch and the nationalists broke out anew on July 20, 1947. The Dutch, claiming constant violations of the Netherlands-Indonesian truce by the Republic of Indonesia, had secured a large part of Java and much of Sumatra by the end of July.

In response to a call from the U.N. Security Council, both sides issued cease-fire orders on Aug. 4, 1947, although the Netherlands Government questioned the competency of the Council to intervene in the matter. The Council appointed a "good offices" commission under whose auspices the Netherlands and the Republic signed another truce agreement on Jan. 17, 1948, with final political agreement to be negotiated within a year. The Dutch installed a provisional federal government for the whole area on March 9, 1948, but it was opposed by the Republic. The U.N. Good Offices Commission in Batavia reported May 29 that the Netherlands and Republic of Indonesia were observing the cease-fire negotiated in January but had yet to reach complete agreements. The Republic opposed Dutch actions towards forming a "Provisional Federal Government for Indonesia."

Meanwhile, the other constituent parts of the proposed U. S. of Indonesia, began to take shape. An East Indonesian Government was formed on Jan. 13, 1947, and autonomous West Borneo (Kalimantan) and East Borneo (Great Slak) states were recognized by the Netherlands Government on May 12 and Aug. 26, respectively.

Dutch forces in Indonesia numbered more than 100,000 in 1948, including

about 40,000 men of the Royal Netherlands Indies Army, composed of Dutch, Eurasians and Indonesians with Dutch officers. The Indonesian Republic's army numbered an estimated 200,000, equipped to some extent with Japanese matériel.

SOCIAL AND ECONOMIC CONDITIONS. There are more than 20,000 native schools with approximately 2,500,000 pupils, and 628 European-type schools with 150,000 students, but the illiteracy rate is high. There are institutions of higher learning at Batavia and Bandoeng, and numerous schools are maintained by Christian missionaries.

The islands of Java and Madura, with only seven percent of the area, have more than two-thirds of the population, and are among the most densely settled areas in the world (more than 800 per sq. mi.). The natives, including about 137 races and tribes, are mainly of Malayan stock, with the Javanese the most advanced.

Agriculture engages about 70 percent of the adult males. Rich in a variety of crops, the islands prior to World War II produced about 31 percent of the world's copra, 37 percent of its rubber, 83 percent of its pepper, and nearly all of its quinine. The big-estate agriculture on Java and Sumatra is devoted mainly to export. The rest is subsistence agriculture. Rice is the staple food and the chief crop, with 1946 production for Java and Madura alone about 52,770,000 quintals. Sugar cane, rubber, tea, coffee, tobacco and quinine are the leading plantation products. Corn, kapok, agava fiber, tapioca, spices, fruits and vegetables are also main crops. Livestock, important to the natives, included in 1940 a total of 3,175,000 carabaos, 4,600,000 cattle and 710,000 horses. Political conditions thus far have rendered impossible the compilation of definite postwar statistics. Recovery of plantation agriculture, especially sugar, tea and pepper, has been hampered by the "scorched earth" tactics of the nationalists.

MAJOR AGRICULTURAL PRODUCTS, 1940

Crop*	Metric tons
Sugar cane	1,587,364
Rubber	546,021
Palm oil	241,702
Tea	81,986
Coffee	77,647
Tobacco	27,414
Quinine	16,377
Cacao	1,553

*Complete rice statistics not available.

Industry, especially in Java, developed rapidly after 1930. In addition to industries connected with the processing of the rich natural products, there were established chemical works, textile and paper mills, soap factories, breweries, shipyards, Goodyear tire and rubber plant and a Gen

eral Motors assembly plant. In 1940 there were 5,469 manufacturing plants with 288,341 workers and gross annual production of \$211,000,000. Cottage industries, mainly on Java, also were important. War damage was severe, and enterprises under Dutch control in 1947 were operating at only a third of 1939 capacity.

Exports in 1947 (from Dutch-controlled areas) totaled U. S. \$126,551,000 (1939: \$394,479,000), led by petroleum, rubber, tin and copra. Imports were \$285,282,000 (1939: \$250,460,000), led by textiles, foodstuffs and machinery. The U. S. was the chief supplier (about half), followed by Great Britain and the Netherlands; exports went mainly to Singapore (for re-export), the U. S., Netherlands and Britain.

In 1940 there were 43,450 miles of road, mostly in Java and Sumatra; and 4,620 miles of railway, of which 3,387 were in Java and 1,233 in Sumatra.

The last prewar budget, scheduled for 1942, anticipated revenue of 750,918,773 guilders, and expenditure of 813,802,815 guilders. The national debt in 1940 was \$763,593,868.

Oil is the principal mineral product of the Netherlands Indies. The fields, in Sumatra, east Borneo and east Java, produced 62,100,000 barrels in 1939, which was 3 percent of the world total. In 1947, production was estimated at only about 8,320,000 barrels.

The islands' output of 30,100 tons of tin in 1939 amounted to 16 percent of the world supply. The industry recovered more rapidly than others after World War II, and produced 15,915 tons of tin ore in 1947. Other mineral production includes coal, gold, bauxite, silver, asphalt, sulfur, diamonds and manganese.

Forests, covering a large part of the islands, yield such products as timber, rattan, bamboo, gum, wild rubber, gutta-percha and quinine. The principal timber is teak, found mostly in east Java. Ebony, sandalwood and ironwood also are cut.

TOPOGRAPHY AND CLIMATE. A backbone of high mountain ranges with many snow-capped peaks extends throughout the main islands of the archipelago. Earthquakes are frequent, and there are many active volcanoes, 90 of them in Sumatra. Borneo and New Guinea are heavily forested, with interiors that are difficult to penetrate.

The climate throughout the group is equatorial and monsoonal, with little variation of temperature (yearly average about 80°; at Batavia, 79°) and rainfall averaging over 100 inches a year. In Sumatra and Java the hot and rainy season usually lasts from May to October; December and January are relatively cool and dry; February, March and April, hot and dry.

Nicaragua (Republic) (República de Nicaragua)

Area: 57,143 square miles.*

Population (est. 1947): 1,148,724 (1943: mestizo, 69%; white, 17%; Negro, 9%; Indian, 5%).

Density per square mile (land only): 21.4.

President: Victor M. Román y Reyes.

Principal cities (est. 1945): Managua, 132,154 (capital); León, 48,862 (trading, railroad center); Matagalpa, 50,072 (coffee center); Jinotega, 37,934.

Monetary unit: Córdoba.

Language: Spanish.

Religion: Roman Catholic.

*Including inland water area of 3,475 square miles.

HISTORY. Nicaragua was first visited by the Spaniards in 1522. The chief of the country's leading Indian tribe at that time was called Nicaragua, from whom the nation derived its name. The country was part of Spanish Guatemala until the general Central American revolution in 1821. Upon the dissolution of the Central American Union in 1838, Nicaragua established itself independently. A United States naval force intervened in 1909 after two American citizens had been executed, and a few U. S. Marines were kept in the country from 1912 to 1925. The Bryan-Chamorro Treaty of 1916 gave the United States an option on a canal route through Nicaragua, and naval bases in the Gulf of Fonseca on the Pacific coast and on Corn Islands on the Atlantic side. Disorder after the 1924 elections brought in U. S. Marines again, but they were withdrawn gradually after the U. S.-supervised elections of 1928, although sporadic fighting continued between government troops and rebel forces under General Augusto Sandino. Juan B. Sacasa was elected president in the U. S.-supervised elections of 1932, but he was forced to resign in 1936. General Anastasio Somoza, elected president in Dec., 1936, restored political and economic stability. Re-elected in 1939, he remains the virtual dictator. Dr. Leonardo Argüello was elected president in Feb., 1947 but was ousted three weeks later because of his opposition to Somoza. The newly elected constituent assembly named Victor M. Román y Reyes president on Aug. 15, 1947.

GOVERNMENT AND DEFENSE. The constitution of 1939 provides for a president, popularly elected for six years, and a two-house Congress—a 40-member Chamber of Deputies and a 16-member Senate—both elected for six years. There are fifteen regional departments. Military service is voluntary. The Guardia Nacional, both an army and police force, numbers about 3,500. A naval base built at the Pacific port of Corinto by the U. S. during World War II was turned over to Nicaragua in 1946.

SOCIAL AND ECONOMIC CONDITIONS. Although primary education is free and compulsory, about 60 percent of the people are illiterate. There are three universities and several vocational schools. In 1946 there were 1,275 schools of all kinds, with 84,651 students. Western Nicaragua, with about 75 percent of the population, is inhabited principally by mestizos of Spanish and Indian blood, with some whites and Indians. Negroes and Indians are dominant in eastern Nicaragua.

More than half of Nicaragua is jungle-covered; agriculture, the leading industry, utilizes only 10 percent of the total land. Coffee (1947: 230,000 bags) is the chief crop and grows in the western part, which also produces sugar cane, cacao, sesame, beans, rice, tobacco and corn, the chief subsistence crop. Bananas lead in the eastern part, with cotton second. About 900,000 acres are devoted to livestock grazing. Except for some sugar refining, only locally consumed products are manufactured.

Exports in 1947 totaled \$21,085,850 (1946: \$18,131,800) and imports \$20,979,827 (1946: \$14,822,775). In 1947, gold accounted for about a third of the exports, and coffee about a quarter. Other items are sesame, lumber, cattle, rice and ipecac. The United States took 77 percent of the exports and supplied 85 percent of the imports.

Gold (exports 1947: 211,539 troy oz.) has surpassed coffee as the most lucrative export. Silver exports in 1947 were 214,363 troy oz. One-third wooded, Nicaragua produces mahogany, rose wood, cedar, rubber and ipecac root. Log exports in 1946 were 10,141,656 bd. ft. and lumber exports 9,469,848 bd. ft. (mostly pine).

Good highways, long lacking, are now being constructed. Railways, mostly nationalized and limited to the west, were only 238 miles in 1946. TACA (Central American Airlines) and Pan American both supply air service. Corinto and San Juan del Sur, on the Pacific, are the chief ports.

The budget report for 1948-49 recommended expenditures of 76,745,655 córdobas. The public debt on Dec. 31, 1947, was \$9,432,773.

TOPOGRAPHY AND CLIMATE. Largest but most sparsely populated of the Central American nations, Nicaragua is mountainous in the west, with fertile valleys. A plateau slopes eastward toward the Caribbean. Two big lakes—Nicaragua, about 100 miles long, and Managua, about 38 miles long—are connected by the Tipitapa River. The Pacific coast is bald and rocky; the Caribbean coast, swampy and indented, is aptly called the "Mosquito Coast." The highlands have cool temperatures, while the coasts are hot and sultry. The east coast receives up to 100 inches of rain a year. The wet season is generally from May or June through November or December.

Norway (Kingdom)

(Norge)

Area: 124,556 square miles.
Population (census 1946): 3,123,883* (Norwegian, 98.7%; Swedish, .8%; others, .5%).
Density per square mile: 25.0*.
Sovereign: King Haakon VII.
Prime Minister: Einar Gerhardsen.
Principal cities (census 1946*): Oslo, 289,000 (capital, chief port); Bergen, 109,000 (seaport, shipbuilding); Trondheim, 56,000 (seaport, timber, fish); Stavanger, 49,000 (seaport, fisheries).
Monetary unit: Krone.
Language: Norwegian.
Religions: Evangelical Lutheran (state), 96.8%; others, 3.2%.
 *Preliminary figures.

HISTORY. Emerging in 1945 from the harsh German occupation of World War II, Norway faced the problem of rebuilding a shattered economy and of replacing the 50 percent losses suffered by its merchant shipping fleet, once the fourth greatest in the world. To achieve these goals, the government launched a five-year plan with the goal of full recovery planned for 1950. The country, about the size of New Mexico and the most thinly-populated nation of continental Europe, is one of the world leaders in fishing.

Norwegians, closely akin to the Swedes and Danes, are of Teutonic origin. In the 7th and 8th centuries, Vikings from Norway constantly attacked the British Isles, and in the 9th century many of them settled in what are now Eire and Normandy. Norway became a united kingdom in 872 under King Harald Haarfager. Christianity was introduced in the 10th century by King Olaf I.

Under the rule of Haakon IV (1217-63), Norway reached a peak of power, ruling the Shetland and Orkney Islands, Iceland, Greenland and the Hebrides. In 1319 Norway and Sweden were united under King Magnus VII, and in 1397 Denmark joined this union under Erik of Pomerania.

In 1450 the triple bond gave way to a union in which Norway was closer to Denmark, but the Treaty of Kiel, in 1814 at the end of the Napoleonic Wars, ceded Norway to Sweden. Norway protested and declared itself independent. Sweden thereupon invaded Norway and forced the issue, requiring Norway to recognize the king of Sweden but leaving Norway its own government, army, navy and customs.

After this union was dissolved in 1905, Prince Karl of Denmark was elected king of Norway by the Storting (parliament) and ascended the throne as Haakon VII. During World War I, Norway was able to preserve its neutrality, though it suffered greatly from the Allied blockade and from the loss of many merchant ships. In World War II, Norway was invaded by the Ger-

rans on April 9, 1940, and resisted for two months before Nazi control was complete. On June 7, King Haakon and the government fled to London and established a government-in-exile.

Meanwhile, in Norway, a new word was born—quisling. It was derived from Major Vidkun Quisling, a Norwegian traitor who collaborated with the Germans and who was Minister President of the German-sponsored occupation government. Quisling eventually was executed by the Norwegians in October, 1945.

King Haakon and the government returned immediately after the German collapse in May, 1945, and an interim coalition cabinet took over, headed by Einar Gerhardsen. The latter's Labor party won a majority in the general elections of Oct. 3, 1945, and the all-Labor cabinet formed on Nov. 5, 1945, has since led the nation in its efforts to regain prewar normality.

King Haakon VII, born August 3, 1872, second son of Frederick VIII of Denmark, married Princess Maud (born 1869, died 1938), third daughter of Edward VII of England. Their one son—Olaf, Crown Prince, born July 2, 1903—married Princess Märtha of Sweden (born 1901) on March 21, 1929. Their children are Princess Ragnhild Alexandria (born 1930), Princess Astrid (born 1932) and Prince Harald (born 1937). King Haakon is the uncle of Frederick IX of Denmark.

GOVERNMENT AND DEFENSE. Norway is a constitutional and hereditary monarchy with succession in the direct male line. The king's executive power is exercised by a council of state, or cabinet, consisting of the prime minister and at least seven other councilors. The 150 members of the Storting are popularly elected for a term of 4 years under proportional representation. When assembled, the Storting divides itself by election into two sections, the Lagting, composed of one-fourth of the members (38) and the Odelsting, composed of the rest. The Storting has a predominant position in the government since the cabinet is responsible to it. Moreover, the king cannot dissolve it before the expiration of its term. There is universal suffrage for all citizens male or female over 23. Party representation in the Storting (elections of Oct. 8, 1945) is Labor, 76; Conservative, 25; Liberal, 20; Communist, 11; others, 18.

The department of defense serves as a coordinating body for the army, navy and air force. The army is a national militia with compulsory service from 18 to 55. Army strength in 1947 was about 15,000, including 4,400 stationed in the British zone of Germany. The air force had 100 planes. The Navy on Dec. 31, 1947, had 8 destroyers and large torpedo boats, 5 submarines, 3 corvettes, 3 minelayers, 2 old coast de-

fense ships and a number of smaller craft. **SOCIAL AND ECONOMIC CONDITIONS.** Education is compulsory and free from 7 to 14. Illiteracy is almost unknown. In 1942-43, elementary schools had an enrollment of 297,770, and secondary schools had 35,523. The University of Oslo had an enrollment of 6,000 in Sept., 1946.

The endowed state religion to which the king must conform is Evangelical Lutheran. The king nominates the clergy of the established church, which takes a leading part in primary education. All other Christian religions are tolerated, but Jesuits are barred.

From 1820 to 1920, more than 800,000 Norwegians emigrated, 96 percent of them to the United States.

The well-advanced social welfare program includes social security, introduced late in the 19th century, poor relief, care of mothers and children, schools for the blind, deaf and deformed, housing, training of social workers, and old-age pensions. Labor is protected by a number of acts which provide for vacations, arbitration of disputes, and unemployment, accident and sickness insurance. The cooperative movement is well-organized.

Land suitable for cultivation, estimated at less than 5 percent of the total area, consists of strips in the deep narrow valleys and around firds and lakes. Food-stuff production is insufficient to meet domestic needs. Leading crops, with 1946 production in quintals, are wheat (799,000), barley (939,000), oats (1,858,000), potatoes (12,044,000), hay and fodder. The country is more adapted to stock raising than to crop growing; in 1946 there were 1,275,200 cattle, 1,002,000 sheep (excluding lambs), 1,729,500 horses (excluding foals) and 138,600 adult goats.

Raw materials produced in Norway form the basis of most of the manufactures. In 1944 there were 4,905 industrial establishments with 153,436 workers and production valued at 2,363,282,000 kr. Leading industries are wood and paper, machinery and metals, food, and electro-chemicals. On June 30, 1948, 67 vessels of 75,681 tons were under construction in Norwegian yards. Industrial production in 1948 was approximately 25 percent above the prewar level.

Statistics of foreign trade are as follows, in millions of kroner:

	1938	1946	1947
Exports	787	1,202	1,814
Imports, c.i.f.	1,193	2,197	3,817

In 1947 the leading suppliers were the U. S. (25%), Britain (19%), Sweden (8.4%) and Belgium (6.3%). Chief customers were Britain (14%), Sweden (10%),

Denmark (7.7%) and France (6.3%). Principal exports were paper, pulp and cardboard (26%), fish (24%), fish oils and metals and ores. The normally adverse trade balance is offset to some extent by invisible exports, particularly the earnings of the large merchant marine.

Norway is one of the greatest seafaring nations, and her merchant fleet of 1,683 ships of 3,760,941 gross tons (June 30, 1947) is third largest in the world. Wartime losses amounting to 2,393,000 tons were the third highest among the United Nations. The long coast line and the difficulties of inland transportation make coastal shipping especially important, while shipping revenues yield important invisible exports. In 1945 there were 2,655 miles of railway, mostly nationalized, and 27,311 miles of highway.

Revenue and expenditures for the year 1947-48 were estimated to balance at 2,117,000,000 kr. The national debt on May 31, 1946, was 6,908,000,000 kr.

Mineral resources are extensive, but coal deposits are entirely lacking except in Spitsbergen. The most important minerals (1946 production, in metric tons) are iron ore (90,000), aluminum (16,800), pyrite ore (537,900), pig iron (120,000 in 1944), nickel ore, zinc, copper ore, molybdenum ore, tungsten, tin and silver. Cheap electrical power makes possible the extraction of nitrogen from the air and manufacture of potassium nitrate, an important fertilizer.

The forests, largely in the south and southeast, are one of the chief natural resources. About 25 percent of the total area is covered with forests, of which 70 percent is pine. Timber production in 1939 was 138,448,024 cu. ft., and production of all forest products amounted to 229,323,557 cu. ft. Most of the timber produced is consumed in the paper and pulp industry.

Fishing is one of the principal industries, engaging as many as 100,000 persons annually. A large number of the best European food fisheries are situated along the coast. The 1947 catch totaled 1,058,700 metric tons valued at 296,000,000 kr. Norwegians are the world's leading whalers and were the first to develop pelagic (open sea) whaling. Whale-oil production in 1945-46 was 518,842 barrels.

TOPOGRAPHY AND CLIMATE. Nearly 70 percent of Norway is uninhabitable and covered by mountains, glaciers, moors and rivers. Its extreme length from the Skagerrak to North Cape—Europe's most northerly point, far above the Arctic Circle—is about 1,100 miles. Breadth averages 60 miles, with a maximum of 260. The hundreds of deep fjords that cut into Norway's coast line give it an over-all ocean front of more than 12,000 miles. Along the Swedish border are the rugged Kjölen (Keel) Moun-

tains, and northeast of Bergen are the highest of Norwegian mountains, with Galdhøpiggen rising to 8,097 feet. Islands off the coast, numbering almost 150,000, form a breakwater and make a safe coastal shipping channel. The Lofoten and Vesterålen Islands, off the northwest coast, have an area of about 1,560 square miles and are a cod fishing center.

Norway has many rivers and lakes. Most of the rivers are short and swift, with numerous falls, and are invaluable as sources of hydroelectric power. By increasing the development of such power, Norway hopes to free itself from the necessity of importing coal, of which it has almost none.

The Gulf Stream affects the climate mildly. Summer temperatures range from about 50° in the extreme north to 60.6° at Oslo in July. February temperatures in Oslo average 24°, against 11°-12° in the north. Norway is one of the lands of the midnight sun; in the extreme north for many weeks in the summer the sun never sets, and for an equal time in the winter the sun does not rise. Rainfall is heavy on the coast but decreases sharply inland.

OUTLYING TERRITORIES

SPITSBERGEN (SYVALBARD).

This arctic archipelago, with an area of approximately 25,000 square miles, lies about 400 miles north of Norway and consists of West Spitsbergen (15,200 sq. mi.), North-East Land (about 6,000 sq. mi.), Edge Island (2,500 sq. mi.), Barents Island (580 sq. mi.), and several small islands including Bear Island. The group was probably discovered by Norwegians in A.D. 1194 and rediscovered by the Dutch navigator Barents in 1596. The question of sovereignty was long unsolved. By a treaty signed with the disputing nations on Feb. 9, 1920, however, Norwegian sovereignty was recognized, and Norway declared the area a part of the kingdom Aug. 14, 1925. Spitsbergen was occupied by Allied forces in the summer of 1941. Soviet proposals for establishment of joint military bases were rejected by Norway in Feb., 1947.

In the 18th and 19th centuries, Spitsbergen was a whaling center, but now the only important product is coal (1947: 345,000 metric tons). Population (1940-41); largely miners, none indigenous: 2,225.

JAN MAYEN ISLAND.

This arctic island (144 sq. mi.), lying between Greenland and the north of Norway, was discovered by Henry Hudson in 1607. It was annexed to Norway May 8, 1929. A Norwegian weather station was established in 1921, and during World War II a U. S. Navy weather station was maintained on the island. It is otherwise uninhabited.

OTHER TERRITORIES. Norway also exercises sovereignty over Bouvet Island (22 sq. mi.) in the South Atlantic, Peter I Island (94 sq. mi.) in the Antarctic Ocean, and that part of the Antarctic continent lying between 20 degrees and 45 degrees east. All are uninhabited.

Outer Mongolia (Republic)

Area: 580,158 square miles.

Population (est. 1941): 900,000 (Mongol, except for about 100,000 Russians and 50,000 Chinese).

Density per square mile: 1.55.

Ruler: Marshal Choy Bal-san.

Principal city: Ulan Bator Khoto (Urga), 100,000 (capital).

Monetary unit: Tugherik.

Languages: Mongolian, Russian.

Religion: Lama-Buddhism.

HISTORY AND GOVERNMENT. Outer Mongolia, known also as the Mongolian People's Republic, is a Russian satellite that measures more than twice the area of Texas. It contains the original homeland of the historic Mongols, whose power reached its zenith during the 13th century under Kublai Khan. The area accepted Manchu rule in 1689, but after the Chinese Revolution of 1911 and the fall of the Manchus in 1912, the northern Mongol princes expelled the Chinese officials and declared independence under the Khutuktu or "Living Buddha." In 1921, Soviet troops entered the country and facilitated the establishment of a republic by Mongolian revolutionaries in 1924 after the death of the last Living Buddha. China, meanwhile, continued to claim Outer Mongolia but was unable to back the claim with any strength. Outer Mongolia significantly signed a military alliance with Russia in 1936 and a treaty of friendship in 1946.

Under the Chinese-Russian Treaty of 1945, China agreed to give up Outer Mongolia, provided that a plebiscite on independence be held first. The subsequent vote was announced as 483,291 to 0, in favor of independence. On Jan. 5, 1946, China recognized Outer Mongolia's independence.

The government of the republic is strikingly similar to the Soviet system. The Great Hural or Huruldan (parliament) is elected by universal suffrage, meets at least once in three years and picks 30 members to act as an executive committee—the Little Hural—which in turn selects a residuum of seven members as an interim body. A cabinet of ten ministers appointed by the Little Hural governs the country. The only political party is the Mongol People's Revolutionary Party, formed in 1921 around a nucleus of young Soviet-trained Mongols. The army of several

thousand is Russian-trained and equipped. **SOCIAL AND ECONOMIC CONDITIONS.** A number of young Mongols are regularly sent to the U.S.S.R. for technical training. The capital, Ulan Bator Khoto, former holy city of the Mongols, has a radio station, several newspapers published in Mongolian, high schools, a university, medical schools, and a military school with Soviet advisers. In 1944, there were 285 primary, 36 secondary, 8 technical and 190 nomad schools in the republic. In 1947 there were 90 hospitals and 234 medical centers.

The country is largely pastoral. There are few areas suitable for crop growing, but some millet, rye and wheat are produced. Most of the people are essentially nomadic or seminomadic; flocks and herds remain the chief source of wealth. In 1942 there were 1,340,000 horses, 270,000 camels, 1,500,000 oxen and 10,600,000 sheep.

There are a few industrial enterprises, including a machinery factory, a brick factory and an electric power station all located at Ulan Bator Khoto; power plants, printing shops and automobile repair shops have also been established. All land, natural resources, factories, mines, hay-making stations and public utilities are nationalized.

Foreign trade, a state monopoly, is carried on entirely with the Soviet Union. The only available trade statistics (1936) indicated exports valued at \$5,892,000 and imports valued at \$9,251,000. Leading exports are livestock, wool, hides, animal hair, meat and furs.

Although the old caravan routes are still used, and transportation is mainly by horse, camel or ox carts, a number of motorable roads exist (1938: 2,477 mi.) including a highway from Ulan Bator Khoto to the Siberian border town of Kyakhta. An airline also functions between Ulan Bator Khoto and Ulan Ude in the Buryat Mongol Autonomous S.S.R. which borders Mongolia on the north. No railways are known to exist, but a line is projected between Ulan Bator Khoto and Kyakhta.

Reserves of 500,000,000 tons of coal are said to exist in the Nalaikha field near Ulan Bator Khoto. Production in 1938 was 71,650 tons. Some gold is mined. Deposits of antimony, copper, iron ore, lead, graphite, mercury, sulfur and silver exist. **TOPOGRAPHY AND CLIMATE.** The productive regions of Outer Mongolia—a tableland ranging from 3,000 to 5,000 feet in elevation—are in the north, which is well drained by numerous rivers, including the Kerulen, Tola, Orkhon and Selenga. The climate is continental, with hot summers and cold winters. Mean temperature at Ulan Bator Khoto is 15° in January and 64° in July. Rainfall is light throughout the country, and almost negligible in the Gobi Desert in the southeast.

Palestine

Area: 10,159 square miles.

Population (est. 1946): 1,912,110.

Density per square mile: 188.2.

Principal cities (est. 1946): Jerusalem, 164,440 (religious center); Tel Aviv, 183,200 (Jewish communal center); Haifa, 145,430 (chief port); Jaffa, 101,580 (seaport).

Monetary unit: Palestinian pound (£P).

Languages: English, Hebrew, Arabic.

Religions (est. 1946): Mohammedan, 59.7%; Jewish, 31.7%; Christian, 7.5%; others, 1.1%.

HISTORY. Palestine was torn in 1948 by a bitter Arab-Jewish civil war which confronted the U.N. Security Council with its most severe test and finally forced the Council in July 1948 to declare the situation a "threat to world peace" in order to bring about an end to hostilities. Meanwhile, the termination of the British mandate brought upon the scene a new nation—Israel—the first Jewish national state since Roman times.

The history of troubled Palestine, cradle of two of the great religions of the world, is mostly a chronicle of invasion, conquest and confusing divisions. To the ancient Hebrews it was known as the "Land of Canaan"; the name Palestine is derived from that part of the country inhabited by the Philistines of Biblical times. About 1000 B.C. the Hebrews succeeded in establishing a single monarchy, which later split up into two kingdoms—Judah and Israel. The country was subsequently invaded and overcome by many peoples, including the Assyrians, Babylonians, Egyptians, Persians, Macedonians, Romans and Byzantines. In A.D. 634-36, Palestine was wrested from the Byzantine Empire by the Arabs. Frankish Crusaders captured Jerusalem in 1099 and set up a feudal kingdom which endured until the defeat of the Franks by Saladin (1187) and the restoration of Moslem rule. In 1516 suzerainty over the area was transferred from the Mamelukes of Egypt to the Turks. It remained part of the Ottoman Empire until World War I, when British forces under General Allenby defeated the Turks and captured Jerusalem (Dec. 9, 1917). The League of Nations mandate awarded to Britain was put in force Sept. 29, 1923.

Meanwhile, a movement had been founded in 1897 by Theodor Herzl to create a Jewish homeland in Palestine, and a considerable number of Jewish immigrants had entered the country prior to World War I. On Nov. 2, 1917, official British recognition was given both to the growing Arab nationalist movement and to the Zionist aspirations by the issuance of the so-called Balfour Declaration, which read:

"His Majesty's Government view with favour the establishment in Palestine of a national home for the Jewish people, and will use their best endeavours to facilitate

the achievement of that object, it being understood that nothing shall be done which may prejudice the civil and religious rights of existing non-Jewish communities in Palestine, or the rights and political status enjoyed by the Jews in any other country."

The declaration was attacked by the Arabs. Throughout the period between the two World Wars, outbreaks of violence and open revolt occurred. Jewish immigration continued, especially after the rise of Hitler. A British royal commission report approved by the British Government July 7, 1937, recommended the partition of Palestine into an Arab and a Jewish state separated by a mandated area in the vicinity of Jerusalem and at Nazareth. The Arabs opposed the proposal, advocating instead the establishment of an independent Palestine with full minority rights for the Jews. In May, 1939, the British Government issued a White Paper declaring the establishment of a Jewish state contrary to British obligations to the Arabs and promising, after a transitory period of ten years, the establishment of an independent Palestine in which Arabs and Jews would share authority in government. During the next five years, 75,000 Jews were to be allowed to enter Palestine. These proposals did not satisfy either party, and the League Mandates Commission questioned their validity, but the outbreak of World War II overshadowed all other issues.

Arab-Jewish cooperation in the war effort introduced a period of order, but the end of European hostilities in 1945 brought a renewal of friction and the formation of the Arab League in that year served to demarcate lines of opposition. By 1946, there were many acts of terrorism by the Irgun Zvai Leumi, an illegal army, and the Stern Gang, both of which were repudiated by the Jewish Agency for Palestine. In July 1946, a proposal was made in London for a federalized Palestine consisting of Arab Jewish and British districts and subject to a British-controlled central government. This "Morrison Plan" had British support but was unacceptable to President Truman and was attacked by Arabs and Jews alike.

Attempts to bring Jewish immigrants into Palestine illegally were intensified thereafter, and terrorism grew apace. Meanwhile, on Feb. 14, 1947, the Atlee government referred the whole problem to the United Nations for advice. The majority report of a special U.N. investigating committee recommended to the General Assembly in Sept., 1947, that Palestine be partitioned into Arab and Jewish states which would be independent politically but united economically. Jerusalem would be under international trusteeship. The minority recommended a federal unitary state similar to that proposed by Britain in Feb. 1947 and rejected by both sides.

Acceptance of the majority report by the U.N. General Assembly on Nov. 29, 1947 touched off new outbreaks of violence which British troops had difficulty in controlling. The decision was generally accepted by the Jews, but members of the Arab League announced their determination to resist partition by force, if necessary.

The Security Council voted on April 2, 1948, to call a special session of the General Assembly to reconsider the partition plan and possibly to put Palestine under temporary U.N. trusteeship. Instead, the Assembly, without disturbing the partition plan, voted on May 14 to send a U.N. mediator to Palestine to attempt to secure peace. Count Folke Bernadotte of Sweden was unanimously chosen mediator on May 20.

Termination of the British mandate on May 14 and withdrawal of British forces brought new violence. An independent state of Israel was immediately proclaimed by the Jewish National Council, and Arab forces converged on Palestine from the south, north and east, spearheaded by the crack British-trained Arab Legion of King Abdullah of Trans-Jordan. Within a few hours Arab-Jewish hostilities were in full swing. On June 1, however, both sides accepted a Security Council request for a four-week truce which went into effect on June 11. Count Bernadotte's efforts to effect a compromise were unsuccessful, and on July 9 hostilities were resumed. On July 15 the Council voted to invoke for the first time Article 39 of the U.N. Charter; it declared the situation a menace to world peace and effected an indefinite truce by threatening to employ sanctions or military force to end the conflict. By July 21 all fighting had again ceased and Count Bernadotte resumed his efforts to bring about a lasting compromise. Whatever the result of these efforts, it was apparent in late 1948 that partition of some kind was an inevitable fact which the Arab nations, tested in the brief but bitter fighting, had to recognize.

On Sept. 17 Count Bernadotte was assassinated within the Israeli-held area of Jerusalem, the Government of Israel charging the Stern group with the crime.

GOVERNMENT. After the termination of the British mandate, the provisional government of Israel became the de facto authority in areas of Palestine occupied by Israeli forces—somewhat over half the total area. Authority over the remainder of the country was in the hands of the occupying Arab nations, notably Trans-Jordan in central Palestine and Egypt in the south. A provisional Palestinian administration was set up by the Arab League on July 9, 1948 to maintain essential services in Arab areas but without power to deal

with political questions. Count Bernadotte, the truce overseer and mediator, was assisted by a U.N. truce team of U.S., French and Belgian nationals.

SOCIAL AND ECONOMIC CONDITIONS (Prior to 1948). Education is neither compulsory nor universal. The public system consists of Government Arab schools and of Jewish schools administered by the Jewish General Council but subject to Government inspection. In 1943-44 the Arab system had 422 schools (13 with secondary sections) with 63,141 scholars; the Jewish public schools numbered 551 with 73,133 scholars. There were 324 private Jewish schools with 24,858 pupils and 327 other private schools with 42,227 pupils. Enrollment at the Hebrew University in Jerusalem was 595 in 1946.

From 1922 until 1944 the estimated increase in the population was 987,576; the estimated increase among Jews was 444,912, among Moslems 472,100 and among Christians 64,083. Four-fifths of the increase in the Jewish population was attributable to immigration, while the increase in the Moslem population was attributable to the high birth rate. A large proportion of the Palestine Christians are Arabs. One of the first acts of the new Israeli Government was to lift all restrictions on Jewish immigration.

Palestine is the Holy Land for Jew and Christian alike and, to some extent, for the Moslems, whose Mosque of Omar stands in Jerusalem. In addition to Jerusalem, historic towns include: Bethlehem, the birthplace of Jesus; Nazareth, in Galilee, His boyhood home; Jericho, famous in both the Old and New Testaments; Hebron, one of the oldest inhabited cities in the world; the ancient town of Beersheba; Acre, near Mt. Carmel; and Askalon, on the coast.

Agriculture remains Palestine's chief industry. The maritime plain, the Plain of Esdraelon, and the northern Jordan Valley are the principal agricultural areas. In 1944 about 380,000 acres were in Jewish possession, of which 48.2 percent had been purchased by the Jewish National Fund for perpetual lease to Jewish settlers. Most of the Jewish rural settlements are located in the maritime plain, the Plain of Esdraelon and upper and lower Galilee. Citrus cultivation, confined largely to the maritime plain, normally furnishes the major export crop. However the industry was disorganized by World War II, with exports dropping from about 15,000,000 cases before 1939 to about 2,425,000 in 1943-44, but recovering to 5,666,468 cases in 1945-46. Other important crops include olives, rice, fresh fruits and vegetables, figs, tobacco, wheat, barley, maize, sesame and potatoes. The dairy industry has made rapid progress in recent years, especially on Jewish farms.

Palestinian industry has also developed

substantially during the past 15 to 20 years. In addition to the manufacture of consumer's goods for home consumption, articles prepared for export include Dead Sea chemicals, glass, shoes and soap. During World War II, Palestine became one of the world's leading diamond cutting centers. Exports in 1945 reached 141,384 carats valued at £6,049,557. Refineries and storage tanks of the Iraq Petroleum Co., are located at Haifa, a terminus of the pipeline from the Iraq oilfields.

Exports (1946) were £24,500,000 and imports £70,400,000. The U. S. was the principal destination of exports (£5,081,000), followed by Egypt (£4,875,000), Britain (£4,371,000) and Greece (£2,175,000). Britain was the principal supplier (£14,209,000), followed by Iraq (£10,482,000, mainly petroleum), U. S. (£5,774,000), Turkey (£5,171,000) and Canada (£3,875,000). The principal articles of export were citrus fruit and juices, edible oils, asphalt, fuel oils, polished diamonds and glass. Leading import items aside from petroleum included grain, livestock, milk powder and fish.

COMMUNICATIONS AND FINANCE. Palestine railways (1942) included 302 miles of broad gauge and 111 miles of narrow gauge (Hejaz railway). All-weather roads (1942) totaled 1,590 miles and seasonal roads 950 miles. In 1947, 6,169 private cars were licensed, and there were 25,996 telephone subscribers.

The Palestinian pound (£P) is at par with the pound sterling. Revenue (1947-48) was estimated at £P21,881,104; expenditure, £P23,559,681. The public debt (1946) was £P8,585,900, and currency in circulation (1947) £P44,908,000.

TOPOGRAPHY, NATURAL RESOURCES AND CLIMATE. Palestine is a plateau traversed from north to south by mountains and broken by great depressions, also running from north to south. The Maritime plain is remarkably fertile. The Jordan, the only important river, rises in Syria and flows south along the Trans-Jordan border through Hule marshes and lake, and the Sea of Tiberias (Sea of Galilee) into the Dead Sea, 1,290 feet below sea level.

Mineral resources are limited. The chief minerals of commercial importance are potash (1945: 98,645 short tons), gypsum, sulfur, limestone and rock salt. The Dead Sea contains many valuable dissolved salts, and petroleum and bitumen exudations are found around its southern end.

There are few forested areas, and wood is a major import in normal years. The catch of fish was 4,680 tons in 1945.

Summers are hot and dry in Palestine, with occasional maximum temperatures of 100°, although 80°-90° is the more normal maximum. In the Jordan valley, noted for

its climatic extremes, the thermometer occasionally reaches 130°; it may range from freezing point to 80° within 24 hours. The mean annual temperature at Jerusalem is 62.8°, with February the coolest month (47.2° mean) and August the hottest (76.3° mean). Rainfall throughout Palestine occurs chiefly in autumn and spring; the mean annual average is 28 inches along the coast and 26 inches in Jerusalem.

(See also ISRAEL, p. 515.)

Panamá (Republic) (República de Panamá)

Area: 28,575 square miles.

Population (est. 1948): 680,519 (1940: mestizo, 65.34%; Negro, 13.31%; white, 11.07%; Indian, 9.53%; others, .75%).

Density per square mile: 23.8.

President: Enrique A. Jiménez (provisional).

Principal cities (1940): Panamá City, 111,893 (capital and chief port); Colón, 44,393 (chief Caribbean port); Ciudad David, 9,222 (bananas).

Monetary unit: Balboa.

Language: Spanish (official).

Religion: Roman Catholic, 93%; Protestant, 6%; others, 1%.

HISTORY. Visited by Columbus in 1502 on his fourth voyage and explored by Balboa in 1513, Panamá was the principal transshipment point for Spanish treasure and supplies to and from South and Central America in colonial days. In 1821, when Central America revolted against Spain, Panamá joined Colombia, which already had declared its independence. For the next 82 years, Panamá attempted unsuccessfully to break away from Colombia. After U. S. proposals for canal rights over the narrow isthmus had been rejected by the Colombian Senate, Panamá proclaimed its independence with U. S. backing in 1903. U. S. Marines restrained Colombian intervention on the ground that the U. S. Colombian treaty of 1846 gave the United States the right to keep the isthmus open.

For canal rights in perpetuity, the United States paid Panamá \$10,000,000, and agreed to pay \$250,000 (\$430,000 after devaluation of the U. S. dollar in 1933) each year. In exchange, the United States got the Canal Zone, a ten-mile-wide strip across the isthmus, and a considerable degree of influence in Panamanian affairs. Since 1903 Panamá's government generally has been stable, with orderly presidential succession. Arnulfo Arias, a pro-Axis president, was ousted and exiled in 1941, and succeeded by Dr. Adolfo de la Guardia.

During World War II the U. S. was granted the right to establish a number of bases in Panamá. All were evacuated in 1948 after the Assembly rejected a 10-year lease agreement on Dec. 22, 1947.

Enrique A. Jiménez was elected provisional president in 1945 by the Nation

Assembly, which later extended his term to Oct. 1, 1948. On July 12, 1948, the Assembly voted 26 to 25 to oust Jiménez, but the latter ignored the action and remained in office with the backing of the national police.

On Aug. 7 the national election jury declared Government candidate Domingo Díaz Arosemena winner of the May 9 presidential election, a decision bitterly denounced by the opposition nominee, Dr. Arias, who fled the country.

GOVERNMENT. Under the 1946 constitution, the Assembly and the president are elected for six-year terms, with the president ineligible to succeed himself. Panamá has no army or navy, but has a national police corps numbering 2,000.

SOCIAL AND ECONOMIC CONDITIONS. Although education is free and compulsory between 7 and 15, illiteracy is very high in Panamá. In 1944 there were 648 primary schools with enrollment of 65,247; 12 public secondary schools with 5,417 students; and a national university in Panamá City with 850 students.

About five-eighths of the nation is unoccupied. A fourth of the population is in Colón and in Panamá City, the oldest white settlement on the Pacific coast of the Americas. In the cities, the lower classes are Negro and Negroid, descendants of British West Indian laborers on the canal. Once literally a pest hole from coast to coast, Panamá has been made into one of the healthiest of the tropical nations through U. S. sanitation methods introduced by Canal Zone officials.

Bananas are the main agricultural crop; others are cacao, tobacco, abacá, rubber, rice, coffee and sugar cane, all of which are exported, as are cattle, hides and gold. Imports in 1947 were \$75,568,225 (1946: \$56,057,498), and exports \$8,349,408 (1946: \$6,800,779). Textiles and food make up about 50 percent of imports, and machinery about 20 percent. The United States normally supplies over half the imports and takes 80 percent of the exports.

The Panama Canal is the country's biggest economic asset. About 37 percent of the 1945 national income was derived from the wages of Panamanians working in the Canal Zone, or from cash spent by U. S. personnel in the Zone. The national budget for 1948 included expenses of \$34,638,742 and revenue of \$33,138,974. The external debt in 1947 was \$21,035,347.

The main railway is the U. S. Government-owned Panamá Railroad, 47.64 miles long, bridging the isthmus from Panamá City to Colón. All rail mileage in 1945 totaled 457; highway mileage in that year was about 1,100. The canal attracts to Panamá the biggest shipping tonnage in Latin America, and shipping under Panamanian registry increased in 1947 to 369

vessels (100 tons and over) of 1,702,260 gross tons.

Minerals include gold, oil, copper and platinum near the Colombian border, but transit shortcomings have hampered development. Forest resources include mahogany, copaiba, sarsaparilla and ipecacuanha. Pearl fishing is a minor industry.

TOPOGRAPHY AND CLIMATE. Panamá, roughly the size of South Carolina, runs east to west for 420 miles from Costa Rica to Colombia, and has a maximum width of 118 miles, with 477 miles of Caribbean coast and 767 on the Pacific. At the narrowest and lowest point, the canal bisects the country. Outlying islands number about 630 in the Caribbean and 116 in the Pacific. Panamá steps up from coastal lowlands, with extremely heavy rainfall, to upland valleys and plateaus covered by dense forest and a few mountain peaks, some volcanic, near the Costa Rican border. Its many rivers are not navigable.

Paraguay (Republic)

(República del Paraguay)

Area: 154,165 square miles.

Population (est. 1947): 1,225,000 (Paraguayan, 97%; Indian, 3%).

Density per square mile: 7.9.

President: Juan Natalicio González.

Principal cities (est. 1943): Asunción, 126,280 (est. 1945: 172,400) (capital); Villarrica, 30,176 (sugar, tobacco); Concepción, 16,007 (port, Paraguay River); Encarnación, 15,610 (rail terminus).

Monetary unit: Guaraní.

Languages: Spanish (official), Guaraní.

Religion: Roman Catholic (official).

HISTORY. Paraguay, a landlocked South American country with a good river outlet to the South Atlantic, is about the size of Montana and, more often than not, is under the rule of a dictator-president.

In 1526 and again in 1529, Sebastian Cabot explored the area when he sailed up the Paraná and Paraguay Rivers. Domingo Martínez de Irala, a Spaniard, founded Asunción in 1537 and became the dominant figure in Paraguay for the next two decades. From 1608 until their expulsion from the Spanish dominions in 1767, the Jesuits maintained an extensive establishment in the south and east of Paraguay. In 1811 Paraguay revolted against Spanish rule and became a nominal republic under two consuls, one of whom, Dr. José Rodríguez Francia, ruled as absolute dictator until his death in 1840. His dictator successor, Carlos Antonio López, was succeeded in 1862 by his son, Francisco Solano López, under whose leadership Paraguay lost a good part of its population in a disastrous five-year war with Argentina, Brazil and Uruguay. In the succeeding decades,

economic progress was handicapped by revolution, intrigue and corrupt government. Paraguay remained neutral in World War I. Economic and financial exhaustion resulted from the war with Bolivia (1932-35), after which Paraguay was awarded three-fourths of the disputed Gran Chaco region (1938).

General José Félix Estigarribia, elected president constitutionally in 1939, was killed a year later in a plane crash. General Higinio Morínigo, elected president by the Council of Ministers in 1940, was the only candidate in the 1943 election. Soon thereafter, Morínigo seized dictatorial powers. He emerged from a 6-month civil war in 1947, still in power; but following national elections in Feb., 1948, in which his (and the only) candidate was elected president, he was ousted in a bloodless coup on June 3. An interim government took over until Aug. 15, when the nominee, Juan Natalicio González, took office.

GOVERNMENT AND DEFENSE. Since adoption of the 1940 constitution, Paraguay has been a semi-authoritarian republic which elects a president every five years by popular vote, and a one-house Congress on a population basis. There is also a Council of State, somewhat equivalent to an upper house, its members named by the government. The presidentially-appointed cabinet administers the government and is required merely to inform the Congress and Council of its policy.

The army numbers more than 8,000. Military service is compulsory for two years. For patrolling the Paraguay River, the country's life line, there is a navy of about 1,400 men with four gunboats. The budget share allotted to defense averages 50 percent.

SOCIAL AND ECONOMIC CONDITIONS. The illiteracy rate is unofficially estimated at 60 percent, one of the highest in South America. Education is free and supposedly compulsory. In 1946 there were 65,000 pupils attending 2,000 elementary schools. The University of Paraguay at Asunción had 1,300 students, and there were several normal and agricultural schools.

The Paraguayans are a homogeneous blend of Spanish, Portuguese and Italian, with considerable Guaraní Indian blood. There are almost no Negroes; the 35,000 to 50,000 uncivilized Indians live mainly in the Chaco. The country is 90 percent bilingual, with Guaraní dominating over Spanish (the official language) in rural areas.

A well-favored land, Paraguay is predominantly a cattle country, keeping about 3,000,000 head. The soil is fertile and the climate suitable for subtropical crops. The chief cash crop is cotton (acreage: 750,000; est. 1946 ginned output: 124,000 quintals); the staple food crop is manioc. Other crops are rice, maize, yerba maté, tobacco, sugar,

peanuts and fruits. Oil of petit-grain, an important perfume ingredient, is extracted from the leaves of the bitter orange. Aside from the production of canned meat (1945: 15,450 short tons) and quebracho extract, the manufactures of the country are only slightly developed, but show steady growth.

Exports in 1947 were valued at \$21,260,000, and imports at \$22,030,000. Argentina took 40 percent of the exports, followed by Great Britain and Uruguay. Argentina also supplied 33 percent of the imports, followed by the U. S. and Brazil. Chief exports are canned beef, quebracho extract, hides and cotton.

River traffic, the principal means of communication, is largely monopolized by a British-controlled Argentine company; plans were announced in June, 1946, for the formation of a Paraguayan-owned river fleet. The Paraguay River is navigable for vessels of 12 ft. draft to Asunción, principal shipping point, and Concepción; and for smaller vessels for its entire length. The Alto Paraná is navigable for larger vessels for almost its whole length. Railway mileage in 1946 was 1,044. Highways, generally poor, totaled 3,760 miles in 1944.

Domestic air service is furnished by the nationalized Línea Aérea de Transporte Nacional (LATN). Several foreign lines supply international service.

The 1947 budget called for expenditures of 56,129,000 guaranis, with an indicated deficit of 9,200,000 guaranis. The national debt in 1945 was about \$22,000,000, since increased by \$12,000,000 in credits from the U. S. and Brazil. U. S. direct investments in 1940 were \$5,037,000; British investments on Dec. 31, 1947, were £2,831,904.

Paraguay's mineral deposits are small, except for manganese in the near-inaccessible northeast. In the western Chaco, a U. S. oil company has been exploring for oil. Forest resources are considerable, especially in the Chaco. Quebracho—the "Axe-breaker," a wood so heavy that it will not float—is the principal commercial tree. The wood has many uses, from paving blocks to ox-cart wheels. Quebracho tannic extract (1945 exports: 32,500 short tons) is the chief product. Its export is limited by agreement with Argentina, also a heavy producer.

TOPOGRAPHY AND CLIMATE. Eastern Paraguay, between the Paraná and Paraguay Rivers, is upland country with the thickest population settled on the grassy slope that inclines toward the Paraguay River. The greater part of the Chaco region, to the west, is covered with marshes, lagoons, dense tropical forest and jungle. In the east, the temperature averages about 81° in summer (December-February) and 64° in winter (May-August). From Asunción, with an annual average greater than 60 inches, the rainfall decreases in the west.

Peru (Republic)

(República del Peru)

Area: 482,133 square miles.

Population (est. 1945): 7,719,276 (white and mestizo, 53%; Indian, 46%; Asiatic, Negro and others, 1%).

Density per square mile: 16.0.

President: José Luis Bustamante y Rivero.

Principal cities (est. 1945): Lima, 657,824 (capital); Callao, 93,313 (port of Lima); Arequipa, 87,260 (commercial center); Cusco, 49,760 (ancient Incan capital); Trujillo, 42,875 (mining).

Monetary unit: Sol.

Languages: Spanish, Quéchua, Aymará (Indian).

Religion: Roman Catholic.

HISTORY. Peru, once part of the great Incan empire and later the major viceroyalty of Spanish South America, is more than three times the size of California. It was conquered in 1531-33 by Francisco Pizarro. On July 28, 1821, Peru proclaimed its independence, but the Spanish were not finally defeated until the Battle of Ayacucho on Dec. 9, 1824. For a hundred years thereafter the Peruvian course was rough. Revolutions were frequent, and a new war was fought with Spain in 1864-66. The dispute with Chile over Tacna and Arica was not finally settled until 1929, and war with Colombia over the Leticia Corridor was narrowly averted in 1931. Major economic development, mostly by foreign capital, began late in the last century. In World Wars I and II, Peru enjoyed cotton and copper booms. General Oscar Benavides became president in 1933 and vigorously set about suppressing popular rights and representative government. He was succeeded in 1939 by President Manuel Prado y Ugarteche.

Peru emerged from 20 years of dictatorship on July 28, 1945, with the inauguration of President José Luis Bustamante y Rivero after the first free election in many years. However, the change to a regime in which political prisoners were freed and the press was free to criticize was soon tempered by factional troubles within the government. As a result, in a cabinet reorganization of Jan. 12, 1947, three members of the leftist APRA party, which had contributed largely to Bustamante's election, were eliminated. The rightist-APRA cleavage continued in 1948 with resultant national tension.

During the June, 1948, crisis the Bill of Rights was suspended. On August 4 the Council of Ministers ended the suspension.

GOVERNMENT AND DEFENSE. Under the 1933 constitution, Peru elects by popular vote every six years a president, two vice-presidents and a bicameral Congress—a Senate of 48 members and a Chamber of 148 members. The president is ineligible to succeed himself. The cabinet, headed by

the prime minister, is presidentially appointed, while Supreme Court judges are elected by the Congress from a presidential list. The central government names the executives of the 24 departments.

Military service is compulsory at the age of eighteen. The army had about 27,500 men in 1947. The air force, with 1,935 men and 90 planes in 1940, received 50 U. S. lend-lease craft in 1942. The 1947 navy had two old cruisers, two destroyers, four submarines, six river gunboats and smaller units. There are about 10,000 police and civil guards.

SOCIAL AND ECONOMIC CONDITIONS. Peru, once the cultural center of Spanish South America, had a 1944 illiteracy rate of 58 percent. Education between 7 and 14 is free, compulsory and state-controlled. Primary schools numbered 7,647 in 1944 and enrolled 717,000, while 61 State secondary schools had 12,474 students. Secondary education is also offered in about 100 schools of religious orders. Five universities had 8,282 students in 1943, including the University of San Marcos, founded in 1551 (oldest in America) with 6,241. In 1946 the government announced an ambitious 5-year plan for building schools.

Most Peruvians are of mixed Spanish and Indian blood. The Indians come from three main stocks—Quéchua, Aymará (Colla) and Chuncho. The relatively large Asiatic population numbered 41,945 in 1940; in 1939 there were 22,738 alien Japanese.

Compulsory social security, established in 1936, covers illness, maternity, disability, old age and death; benefits are steadily being extended.

Land under cultivation is estimated at about 3,617,000 acres, or 12 percent of the total area, with more than 80 percent of the population being dependent upon agriculture. About one-eighth of the cultivated area in the irrigated coastal valleys of the central region is devoted to cotton, the most important crop (1947 production: 71,000 short tons). Sugar (1947: 473,500 short tons), rice, tobacco and coffee are exported, while wheat, corn, potatoes, beans, barley and quinoa (a grain similar to millet) are subsistence crops. Stock-raising, pursued in the Pacific highlands and the elevated parts of the Amazon slope, supplies most of the country's meat needs, as well as wool, hides and skins for export. Llamas, used as beasts of burden, and vicuñas and alpacas, noted for their wool, are native to Peru. Livestock in 1945 was estimated at 14,007,213 sheep, 2,248,517 cattle and 952,198 goats.

Industrialization has been slow. Aside from the copper smelters and oil refineries, the greatest progress has been made in the textile industry, which obtains its raw materials from domestic cotton and wool and from imported silk.

Foreign trade statistics, in millions of soles, are as follows:

	1938	1946	1947
Exports	322	984	1,003
Imports	260	802	1,092

In 1947, 58 percent of the imports came from the U. S., 13 percent from Argentina, and 6.5 percent from Great Britain. The U. S. took 29 percent of the exports, Chile 19 percent, and Britain 8.6 percent. The chief exports are sugar and cotton, followed by copper, gasoline and lead. Principal imports are machinery and motor vehicles, foodstuffs (especially wheat), iron and steel manufactures, electrical goods and chemicals.

Highway mileage in 1946 totaled 18,500, of which more than a third is hard-surfaced; the Pan-American highway had a total Peruvian length of 1,818 miles. Railway mileage was 2,800, much of it over difficult territory. Several airlines supply domestic and international service. There are more than 5,400 miles of navigable tributaries of the Amazon in eastern Peru; the chief Amazon port is Iquitos, 2,653 miles from the Atlantic.

The 1947 budget authorized expenditures of 927,000,000 soles. The public debt on June 30, 1946, was 2,083,000,000 soles. Foreign capital has played a large part in Peruvian economic development. British investments on Dec. 31, 1947, were £27,022,-944; American direct investments in 1940, \$81,597,000.

Peru has vast mineral resources. It ranks fourth in world silver production and mines about 25 percent of the world's vanadium. But mining is second to agriculture, and nearly all of it is in the hands of foreign capital. Petroleum and copper are the most important, with the latter controlled by the American-owned Cerro de Pasco Corporation, which also accounts for much of the gold and silver output. In 1946, gold production was 158,374 oz., silver 12,333,865 oz., copper 28,107 short tons and vanadium 645 tons. Petroleum production in 1947 was 12,763,807 barrels; discovery of rich new deposits has been reported. Total mineral production in 1946 was valued at 407,373,394 soles.

Forest products include rubber (1945: 2,200 short tons), balatá, raw quinine (1945 exports, all U. S.-bought: 849,160 kg.), vegetable ivory, mahogany, cedar, dye woods and coco, the source of cocaine. An important industry on the outlying islands is the gathering of guano (bird excrement), a valuable fertilizer used almost entirely domestically. The fish canning industry is assuming considerable importance.

TOPOGRAPHY AND CLIMATE. The Andes Mountains divide Peru into three sharply differentiated zones. To the west is the coastland, much of it arid, extending for

50 to 100 miles inland, and 1,400 miles long. The mountain area, with peaks over 20,000 feet high, lofty plateaus and deep valleys, lies centrally. Beyond the mountains to the east is the heavily forested slope leading to the Amazonian plains.

The climate ranges from tropical in the eastern lowlands to arctic among the snow-capped peaks. The coastal area has an average annual rainfall of less than 2 inches and temperatures ranging between 55° and 98°. Temperatures range from 75° to 95° in the humid Montaña, and rainfall between 75 and 125 inches annually.

The Philippines (Republic)

Area: 114,400 square miles.

Population (est. 1947): 19,511,000 (Filipino except [1940] 117,461 Chinese, 29,262 Japanese, 8,739 Americans and 11,515 others).

Density per square mile: 170.6.

President: Elpidio Quirino.

Principal cities (est. 1947): Manila, 832,300 (capital, chief port); Cebu, 164,890 (seaport); Zamboanga, 179,020 (seaport); Davao, 132,900 (seaport); Iloilo, 108,570 (seaport); Ormoc, 93,-980 (seaport).

Monetary unit: Peso.

Languages: English, Tagalog, Bisayan, Spanish, Ilocano, Bicol.

Religions (census 1939): Roman Catholic, 78.7%; Aglipayan (Independent Philippine Catholic), 9.8%; Mohammedan, 4.2%; Protestant, 2.3%; others, 5%.

HISTORY. Fernando Magellan, the Portuguese navigator in the service of Spain, discovered the Philippines on March 16, 1521, and 21 years later a Spanish exploration party named the group of islands in honor of Prince Philip, later Philip II of Spain. Spain retained possession of the islands for the next 350 years, although the Moros in the southern islands continued to harass the Spanish troops until 1850.

The Philippines were ceded to the United States in 1899 by the Treaty of Paris after the Spanish-American War. Meanwhile the Filipinos, led by Emilio Aguinaldo, had declared their independence. They continued guerrilla warfare against U. S. troops until the capture of Aguinaldo in March, 1901. By July, 1902, peace was established in all parts of the islands except those inhabited by Moros.

The first U. S. civilian governor-general was William Howard Taft (1901-04). The Jones Law (1916) provided for the establishment of a Philippine legislature composed of an elective Senate and House of Representatives. The Tydings-McDuffie Act (1934) provided for complete Philippine independence in 1946. Under a constitution approved by the people of the Philippines May 14, 1935, the Commonwealth of the Philippines was inaugurated on Nov. 15 under the presidency of Manuel Quezon y Molina, who was re-elected in 1941.

The Philippines were invaded by Japanese troops on Dec. 8, 1941 (Philippine time), and after the fall of Bataan and Corregidor, President Quezon and his government fled to Washington. The Japanese-sponsored "Philippine Republic" received little support from most Filipinos. U. S. forces led by Gen. Douglas MacArthur re-invaded the islands in Oct., 1944, and after the liberation of Manila (Feb., 1945), Sergio Osmeña, who had succeeded to the presidency on the death of Quezon (Aug. 1, 1944), re-established his government in the Philippines.

Brig. Gen. Manuel A. Roxas y Acuña, who defeated Osmeña in the elections of April, 1946, became first head of the new independent republic, which came into existence on July 4, 1946, as scheduled in the Tydings-McDuffie Act. He died April 15, 1948, and was succeeded by the Vice President, Elpidio Quirino, who pledged continuation of Roxas' domestic program and pro-U. S. foreign policy.

GOVERNMENT AND DEFENSE. Under the constitution of 1935 (as amended in 1940), the Philippines have a republican form of government based on that of the United States. Executive power is exercised by the president, popularly elected for a 4-year term and assisted by a cabinet appointed by him. The popularly elected Congress has two houses—the Senate with 24 members and the House of Representatives with 98 members.

The Philippine army is being reorganized and re-equipped with U. S. assistance. An agreement signed March 14, 1947, provided for the establishment, for a 99-year period, of 23 U. S. military, naval and air bases in the islands.

EDUCATION. In March, 1940, there were 12,057 public schools with a primary enrollment of 1,572,639; intermediate, 277,574; secondary, 90,579; collegiate (normal and technical) 3,777; total enrollment 1,944,569. The 439 private schools had a total enrollment of 149,491 in June, 1940. In 1947 an estimated 3,085,302 pupils were enrolled in public schools, 267,473 in private. Of the 8,466,493 persons reported as engaged in gainful occupations in 1939, 3,912,580 were listed as literate and 4,546,496 as illiterate; 7,417 were unreported. Tagalog is the national language but English and Spanish are used throughout the country.

AGRICULTURE AND INDUSTRY. Agriculture is the chief industry. The last census (1939) showed 1,634,726 farms with a total area of 16,531,716 acres (about 22 percent of total area), of which 9,769,669 acres were under cultivation. The average size of the farms was 10.11 acres, but there were many large plantations. Rice (palay) is the staple native food cereal, but production (2,198,133 metric tons in 1947) is insufficient to meet home consumption. The Phil-

ippines normally produce about half the world copra supply and a large proportion of the abacá (Manila hemp) supply; they are also a leading source of sugar (1947-48: 429,929 short tons) and sugar products, normally the chief export. Other crops include sisal, kapok, cotton, corn, tobacco, coffee, rubber, cacao, citrus fruits and bananas. In the crop year 1946-47, 930,140 tons of copra, 17,660 tons of tobacco and 82,000 tons of abaca were produced. Livestock in 1947 included 1,590,260 carabaos, the farmers' all-purpose animal (reduced by almost 50 percent from 1940); 510,950 cattle; 175,610 horses and 1,852,270 hogs.

Some subsistence crops have reached prewar production levels. Export crops necessary to economic recovery, however, have made slow progress, except for copra.

Industry had made some progress prior to World War II, but private manufactures were still in their infancy. Industrial establishments suffered serious damage as a result of the war. A start has been made in sugar, rope, cigar, cigarette and furniture factories, lumber and rice mills, and modern factories producing beverages, perfumes, cosmetics and other consumer's goods. Preparation of fine embroideries is an important home industry.

FOREIGN TRADE. Statistics of trade, in millions of pesos, are as follows:

	1940	1946	1947
Exports	312	128	531
Imports	269	592½	1,023½

½Excluding surplus property and relief shipments.

Of the 1947 exports, 57.2% went to the U. S., 6.6% to France and 3.7% to Denmark. The U. S. supplied 86.0% of imports, followed by China, 2.8% and Canada, 2.7%. Copra was by far the leading export (66.7%) followed by abaca, desiccated coconut, coconut oil and copra meal and cake. Sugar, leading prewar export, accounted for only a small part of 1947 exports.

FINANCE. The 1948-49 budget estimated all general fund expenditures at 249,496,833 pesos and all revenue at 250,000,000 pesos. Chief sources of revenue are excise taxes and licence, business occupation taxes. The total bonded indebtedness on Mar. 31, 1948, was 33,938,051 pesos. In Apr., 1946, the U. S. Congress appropriated \$520,000,000 for the rehabilitation of the Philippines.

COMMUNICATION. Transportation facilities suffered especially severe damage during World War II. The inter-island trade—extremely important because of the makeup of the archipelago—was served in 1937 by 2,907 vessels licensed for domestic trade, 1,545 for coastwise trade and 1,362 for bay and river traffic. Postwar rehabilitation has been rapid. The port of Manila has ample facilities for ocean-going vessels. Railway mileage (1941) totaled 844, most of which (712 mi.) was on Luzon. Highways totaled 10,925 miles in 1939, of

which 6,127 were improved. Air transportation is assuming an important place in inter-island communication.

MINERALS, FORESTS AND FISHERIES. The Philippines possess large but relatively undeveloped mineral resources. Most important is gold, production of which rose from 160,620 oz. in 1929 to 1,097,000 oz. valued at \$38,282,000 in 1940. Most of the mines in production are lode mines. Also important are silver, iron ore, copper ore, chromite, manganese ore, lead and zinc. Petroleum formations are also known to exist. Mining has been slow to recover from the effects of World War II. In 1947 only 65,030 ounces of gold, 44,186 ounces of silver, 10,132 long tons of copper concentrates, 189,499 tons of chromite (refractory) and 73,182 tons of coal were mined.

The forest area is estimated at more than 43,700,000 acres (about 58 percent of the total area), not including 3,200,000 acres covered with cogón grass, fit for grazing. About 97.5 percent of the total forest area is government-owned. The volume of standing commercial hardwoods and softwoods was estimated at 464,740,000,000 board feet in 1941.

Of the approximately 1,900 different species of fish, only about 100 kinds are marketed, although a majority are edible. Fish exports are chiefly canned tunas.

TOPOGRAPHY. The Philippines are an archipelago of approximately 7,083 islands lying about 500 miles off the southeast coast of Asia and bounded on the west and north by the South China Sea, on the east by the Pacific, and on the south by the Celebes Sea. They extend north and south about 1,152 miles and east and west about 688 miles. The northernmost island, Y'Ami, is 65 miles from Formosa, while the southernmost, Saluag, is 30 miles east of Borneo. Only 466 of the islands have an area of more than one square mile, and only 2,441 have names. The largest islands are Luzon in the north (40,814 sq. mi.), Mindanao in the south (36,906 sq. mi.), Samar (5,124 sq. mi.), Negros (4,903 sq. mi.), and Palawan (4,500 sq. mi.). The islands are the tops of an irregular, submerged mountain chain which is largely of volcanic origin. The plains lying amid the mountains are the most densely populated portions of the islands, except in Cebu, where the people live mostly on the coastal plain. Extensive drainage systems are provided by the numerous short rivers.

CLIMATE. The temperature is warm throughout the year, averaging 80°, with only slight variations. Rainfall averages about 90-100 inches annually, with the wettest season occurring from June or July through October. Typhoons, often causing severe damage, originate in the Pacific and strike the islands from the east and southeast before curving north.

Poland (Republic)

(Rzeczpospolita Polska)

Area: 119,703 square miles.

Population (est. 1947): 24,775,000.

Density per square mile: 206.9.

President: Boleslaw Bierut.

Premier: Joseph Cyrankiewicz.

Principal cities (est. 1947): Warsaw, 550,000 (capital); Łódź, 596,000 (industrial center); Kraków (Cracow), 305,000 (trading center); Poznań, 268,000 (farm products); Breslau (Wrocław), 201,000 (former German industrial center).

Monetary unit: Zloty.

Language: Polish (more than 90%).

Religions: Roman Catholic, Jewish, Protestant.

HISTORY. A victim of aggression and partition throughout the ages, Poland found history repeating itself in World War II. Her area was reduced from that of California to that of New Mexico, and her population was cut by 11,000,000. Her people reeled from the combined effects of the cruel German occupation, a severe famine and general postwar instability. Her postwar government was in the hands of a small Communist minority which allowed little democratic opposition. Poland in 1948 was probably the most faithful member of the Soviet Union's eastern European bloc.

Little of certainty is known about Polish history prior to the end of the 10th century. Early in the 11th century the Polish king, Boleslaus I (the Brave), ruled over Bohemia, Saxony and Moravia. His kingdom fell in the 13th century to the Tartars, who in turn were driven back by two orders of German knights—the Knights of the Sword and the Teutonic Knights—who spread Christianity along the shores of the Baltic. They created a state which included the district of Kulm and part of Poland, subject to the Holy Roman Empire. In 1259 Poland was invaded again by the Mongols, but the country recovered under King Wladislaus I (1306-33), who defeated the Teutonic Knights and reunited Great and Little Poland.

Poland reached its peak of power in the middle of the 15th century. The decline began at the end of that century when the nobles usurped the power of the people and soon reduced the country to anarchy. For 100 years the nobles fought among themselves and occasionally against Turks, Russians and Tartars. In 1683 John Sobieski became a great national hero by defeating the Turks near Vienna.

By the middle of the 18th century Poland was completely decadent and utterly disorganized. The first partition of the country was carried out in 1772 by Prussia, Russia and Austria; the second in 1793 and a third in 1795-96. For more than

100 years thereafter the Poles had no nation of their own and, when World War I broke out, they found themselves fighting on both sides.

The independence of Poland was formally proclaimed in Nov., 1918, and Marshal Josef Pilsudski was confirmed in office as President. In 1919, Ignace Paderewski, famous pianist and patriot, became the first premier. Russia attacked Poland in 1920 but the Poles, under Marshal Pilsudski and aided by the French, defeated the invaders. On May 12, 1926, Marshal Pilsudski seized complete power in a coup d'état and ruled the country dictatorially until his death on May 12, 1935, when he was succeeded by Marshal Edward Smigly-Rydz.

Despite a 10-year non-aggression pact signed with Germany in 1934, Hitler attacked Poland on Sept. 1, 1939. Russian troops invaded from the east Sept. 17, 1939, and on Sept. 28 a German-Russian agreement was signed dividing Poland between Russia and Germany. Before leaving Poland, President Ignacy Moscicki resigned, designating as his successor W. Raczlewicz; the latter formed a government-in-exile in France with Gen. Wladyslaw Sikorski as premier; this government moved to London after France's defeat in 1940. All of Poland was occupied by Germany after the Nazi attack on the Soviet Union in June, 1941. On July 30, 1941, Poland concluded an agreement with the U.S.S.R. voiding all German-Soviet agreements effected after Sept. 1, 1939.

The legal Polish government soon fell out with the Russians, however, and in July, 1944, a Communist-dominated Polish Committee of National Liberation received Soviet recognition. Moving to Lublin after that city's liberation, it proclaimed itself the Provisional Government of Poland on Dec. 31, 1944. After almost six months' negotiations, some of the former members of the Polish Government in London joined with the Lublin government to form the Polish Government of National Unity on June 28, 1945. Great Britain and the U. S. recognized this government on July 5, 1945, and withdrew recognition from the London government.

Democratic participation was negligible in the new government, which has adhered strictly to Soviet foreign policy and pursued a program of internal socialization. The government bloc controlled by the small Communist minority won a sweeping victory in the Jan., 1947, elections, which gave little opportunity to the opposition for campaigning or voting.

On Aug. 2, 1945, in Berlin, Prime Minister Attlee, President Truman and Generalissimo Stalin established a new *de facto* western frontier for Poland, along the rivers Oder and Lausitzer Neisse, pending the final peace treaty. On Aug. 16 the Soviet

Union and Poland signed a treaty delimiting the Soviet-Polish frontier. Under these agreements Poland was shifted westward. In the east it lost 69,860 square miles with 10,772,000 inhabitants; in the west it gained (subject to final peace conference approval) 38,986 square miles with a pre-war population of 8,621,000. By 1948 all Germans in the latter area had been expelled and replaced with Poles who lived formerly in the territory ceded to the U.S.S.R., or in Germany or other countries.

GOVERNMENT AND DEFENSE. Poland is a republic headed by a president chosen for a seven-year term by the Parliament, which consists of 444 members popularly elected for a seven-year term. The administration of the government is carried on by a council of ministers headed by the premier.

The Interim Constitution approved by Parliament on Feb. 20, 1947, provides for a 5-member State Council with far-reaching powers and gives the cabinet wide powers when Parliament is not in session.

Poland's army in 1947 numbered about 165,000 men, organized and equipped along Soviet lines with Soviet assistance. The air force had 400 planes, and the navy 2 destroyers, 4 submarines and a number of minesweepers and coastal craft. Unknown numbers of security troops organized in para-military formations maintain internal order under the direction of the Interior Ministry.

SOCIAL AND ECONOMIC CONDITIONS. In the school year 1946-47 there were 20,132 primary schools with 3,260,000 pupils. Secondary schools numbered 758 with 225,200 pupils. The three pre-1939 state universities of Warsaw, Kraków and Poznan, and the private (Catholic) university of Lublin re-opened in the fall of 1945. New universities have been founded at Lublin, Gdansk (Danzig), Breslau (Wroclaw), Torun and Łódź. Students enrolled in 34 universities and other schools of higher learning numbered 80,841 in 1947.

Poland remains essentially an agricultural country: the areas now under *de facto* Polish administration in the west accounted for 25 percent of Germany's pre-war food production. About 70 percent of postwar Poland is arable land. Much of it has been divided into small farms under the land reform program. Before World War II, Poland exported large quantities of farm products, but in 1948 the harvests barely met domestic needs, even though the population had been reduced 30 percent. Production continues to be hampered by shortages of seed and fertilizer; it was further reduced in 1946 and 1947 by unfavorable weather.

Agricultural production figures in 1946, in short tons (1938 in parentheses) were: rye, wheat and barley, 4,460,676 (11,901,-

092); potatoes, 20,580,472 (38,093,504); sugar beets, 3,381,608 (3,485,914). The estimated animal population is still seriously depleted. On June 30, 1947, there were 2,016,226 horses (50% of prewar), 4,745,883 cattle (45%), 4,273,569 hogs (55%) and 982,819 sheep (30%).

Poland's industrial facilities, although severely damaged during World War II, were not greatly affected by territorial concessions to the U. S. S. R., with the exception of the Lwów area. On the other hand, important German industrial areas, especially Silesia and the city of Stettin, are located in the territories under *de facto* Polish administration. As a result, post-war Poland has a much larger industrial potential. Almost all industries have been nationalized or placed under state control, and a planned economy has been introduced as part of the government's drive to make Poland an industrial nation. Under the impetus of a three-year program of economic reconstruction initiated in 1947, the rehabilitation of Polish industry has been relatively rapid. The average monthly production of steel in 1947 was 145,000 short tons (90% of 1938); cotton yarn 5,421 (90%), electric energy 551,000,000 kwh. (172%), and pig iron and ferro-alloys 79,200 (97%).

Foreign trade is largely conducted by government organizations under the terms of numerous trade agreements with other nations. Statistics, in millions of U. S. dollars, are as follows:

	1938	1946	1947
Exports	223	133*	245
Imports	245	140†	300†

*Excluding special coal shipments to the U.S.S.R. valued at \$57,500,000.

†Excluding UNRRA and other relief, U. S. surplus stores and reparations, with total estimated value of \$418,000,000 in 1946 and \$153,000,000 in 1947.

In 1947 the Soviet Union supplied 26% of imports, followed by the U. S. (13%) and Denmark (10%). The U.S.S.R. took 29% of exports, followed by Sweden (17%), and the United Kingdom (6%). The leading exports in 1946 were coal and coke (59.7%), textiles and clothing (14.3%), iron and steel (4.8%) and sugar (4.4%); the leading imports were grains (26.8%), cotton, wool and flax (13.4%), petroleum products (12.7%) and iron ore (4.5%). In the prewar years 1936-39 the Soviet Union supplied only 1.1 percent of the imports and took 0.4 percent of the exports.

The 1948 budget estimated ordinary expenditures at 277,645,407,000 zlotys, extraordinary expenditures at 47,603,743,000 zlotys, and all revenue at 317,444,150,000 zlotys. An additional 150,000,000,000 zlotys was expected to be spent for investments. The budget includes revenues and expenditures of some government enterprises. The public debt on Oct. 1, 1947 (prewar

debt excluded) was 29,400,000,000 zlotys. The official exchange rate of the zloty—100 to the U. S. dollar—does not reflect the actual relative purchasing power of the two currencies.

On Dec. 31, 1947, the Polish merchant marine numbered 45 ships of 167,800 registered tons. The principal ports, all severely damaged, are Gdynia, with one of the largest harbors in Europe, Gdansk (Danzig) and the former German port of Stettin. Transportation facilities and rolling stock suffered heavy damage during World War II—a factor still hampering Poland's economic recovery. There are about 61,000 miles of public highway, 4,800 miles of inland waterways and 14,500 miles of normal-gauge railway, 85% serviceable.

The acquisition of large coal deposits in German Silesia (estimated at more than 5,000,000,000 tons), combined with much larger reserves in the southwestern region, makes Poland one of the world's leading coal producers. The 1947 output was 65,179,368 short tons, a third of which was produced in former German territory. Iron ore deposits are located in the Kielce and Radom districts and in German Silesia. Production in 1947 was 600,000 tons. Zinc and lead ores are located chiefly in Upper Silesia and the voivodships of Kielce and Kraków. Prewar Poland's principal oil-producing areas, Boryslaw-Drohobycz, are in the territory ceded to the Soviet Union; 1947 production was 880,000 barrels (about 25% of prewar). Among other deposits, Poland possesses copper, sulfur, chalk, clay, kaolin, marble and granite.

Forests cover 22 percent of the land, but important wood resources are located in the territory ceded to the Soviet Union, and current production supplies less than half the annual need.

TOPOGRAPHY AND CLIMATE. Most of Poland is a plain with no natural boundaries except the Carpathian Mountains on the south and the Oder and Neisse rivers on the west. Pomerania is traversed by a range of low hills, while south of Gdansk is a maze of marshes, sand dunes and muddy lakes which extend into Polish East Prussia (Mazuria). The central Polish plain, 300 to 450 feet above sea level and intersected by great rivers, lies south of the flat country along the Baltic shore. Southern Poland and Silesia are hilly regions, while on the right bank of the Vistula is the plateau of Lublin.

Poland's climate is dependent upon her proximity to the Baltic and to the Carpathian Mountains. Abundant rainfall (annual average: 22.8 in.) is caused by the predominating western oceanic winds. Snowfall is not heavy, but temperatures below zero are not uncommon, and the rivers are generally icebound for two and a half to three months each year.

Portugal (Republic)

(República Portuguesa)

Area: 35,413 square miles.

Population (est. June 30, 1948): 8,401,823 (practically all Portuguese).

Density per square mile: 237.2.

President: António Oscar de Fragoso Carmona.

Premier: António de Oliveira Salazar.

Principal cities (census 1940): Lisbon (Lisboa), 1948: 796,227 (capital, seaport); Oporto (Porto), 262,309 (seaport, port wine); Funchal (in Madeira Islands), 54,856 (Madeira wine); Coimbra, 35,437 (university); Setúbal, 35,071 (seaport, sardines).

Monetary unit: Escudo.

Language: Portuguese.

Religion: Roman Catholic.

HISTORY. Rolling and rugged Portugal is about the size of Indiana and, thanks to the days when its sailors and explorers were among the world's most venturesome, has a colonial empire 23 times the area of the homeland. A traditional ally of Britain, Portugal remained neutral in World War II but gave the Allies the right to use vital island bases in the Atlantic. Politically, Portugal is a virtual dictatorship; opposition is officially suppressed, and many phases of the national life are strictly regimented.

Portugal was part of Spain until it won independence in 1143 with Alfonso I as the first king. During the long reign of King John I (1385-1433), a great commercial empire was built, largely through the exploratory hobby of the king's son, Prince Henry the Navigator. Bartholomeu Diaz explored Africa's west coast and reached the Cape of Good Hope in 1488. Vasco da Gama circled the Cape and discovered the water route to India in 1497-99. Portugal's empire reached its crest about 1540, when it embraced the coast of Brazil, east and west Africa, Malabar, Ceylon, Persia, Indo-China and Malaya.

In 1580-81 Spain and Portugal were joined in a personal union under Philip II of Spain. Portugal revolted in 1640 and set up a new dynasty under John IV, Duke of Braganza, but the country never recovered its position as one of Europe's major powers. In 1806, when Portugal refused to obey Napoleon's orders that all continental ports be closed to British ships, French forces invaded the country but were ousted in 1811 by British and Portuguese forces under the Duke of Wellington. The royal family had fled to Brazil in 1807 but following an uprising at home, the king, John VI, returned in 1821.

Brazil declared its independence in 1822 and John's son, Pedro, became emperor of the new state as Pedro I. In 1832, Pedro I, who had abdicated as emperor of Brazil in 1831, returned to Europe and led an uprising with British assistance in favor

of his daughter, Maria II, displacing his younger brother, Miguel I, who had been proclaimed king in 1828. The descendants of Maria's marriage with Ferdinand of Saxe-Coburg ruled Portugal until 1910, when King Manoel II was forced into exile by a republican revolt.

On June 19, 1911, the monarchy was abolished, and a republican constitution was introduced. Portugal proclaimed its loyalty to the British alliance upon the outbreak of World War I, and Portuguese troops fought both in Africa and on the Western Front. There was much internal political instability during and immediately after the war.

On May 30, 1926, a revolution led by the army deposed the president and set up a military dictatorship. General António Oscar de Fragoso Carmona became premier and acting president Nov. 29, 1926, and was elected president on March 25, 1928. Dr. António de Oliveira Salazar, who was appointed finance minister in 1928, founded the organization known as the National Union in 1930 and has been premier and dictator since 1932. His regime, while admittedly opposed to liberal or democratic principles, has brought political and economic stability to Portugal. President Carmona was re-elected in 1935 and in 1942. The general election for members of the National Assembly held on Nov. 18, 1945, was boycotted by the opposition, and the National Union was continued in office.

GOVERNMENT AND DEFENSE. Under the constitution of 1933 Portugal is a corporative republic. The president is popularly elected for a term of 7 years; the National Assembly of 120 members for a term of 4 years. There is also a corporative chamber which handles economic, social and some legislative matters; its 104 members are representatives of local autarchies and of the several branches of social activities—administrative, moral, cultural and economic. The Assembly theoretically may overrule the president's veto by two-thirds vote. The president appoints the premier, who in turn selects the cabinet; the latter is not responsible to the National Assembly.

Military service is compulsory; the initial training period is 6 years, but not all those liable for duty are called up. The army had about 65,000 troops on active duty in 1947 (including the Portuguese Legion, a volunteer force); the air force had 575 planes. The navy in 1948 had 5 destroyers, 3 submarines, 6 sloops and several smaller craft. Naval personnel numbers about 6,000.

SOCIAL AND ECONOMIC CONDITIONS. Compulsory education was introduced in 1911. Elementary schools in 1945 numbered 10,079 with 528,109 students. Second-

ary schools numbered 43 with 17,281 students. Private elementary schools were attended by about 63,000 pupils, and private secondary schools by about 25,000. There were three universities (Coimbra, Lisbon Oporto) with 7,813 students.

Portugal's corporate state has a planned economy in which each producing unit regulates itself in the interest of the nation. Corporate units have been established in agriculture, industry and finance. As an example, the government controls the wine trade by means of a federation of growers and a guild of exporters.

Sixty percent of Portugal's people are engaged in agriculture. Although wheat is the leading crop, it is insufficient to meet domestic needs, and grain must be imported. One of the world's leading winemakers, Portugal produces two famous kinds—Port in the vicinity of Oporto, and Madeira in the islands of the same name. In olive oil production, Portugal usually ranks third in the world (production 1947: 26,750,000 gal.).

Leading crops in 1946, in quintals, were: wheat (1947: 3,245,000), corn 3,800,000, oats 1,800,000, barley 900,000 and potatoes 8,120,000. Wine production in 1947 was approximately 265,000,000 U. S. gallons.

The livestock inventory in 1944 showed 3,889,875 sheep, 1,176,888 hogs, 80,675 horses, 1,196,232 goats and 6,161,065 poultry. Wool production in 1944 was approximately 7,080 short tons.

Portuguese manufacturing is largely limited to consumer's goods for domestic consumption. Besides the production of porcelain tiles, it includes a sizable textile industry in cotton, wool, silk, linen.

Trade statistics, in millions of escudos:

	1938*	1946*	1947
Exports	1,139	4,587	4,307
Imports	2,300	6,860	9,462

*Export figures for these years exclude re-exports; import figures include only goods for home consumption.

In 1947 the principal customers were the U. S. (58%), Portuguese colonies (26%), and Britain (15%); the chief suppliers were the U. S. (31%), Britain (11%) and Portuguese colonies (7%). Chief exports were wine (13%), cotton textiles (12%), raw cork (10%) and sardines (9%). Leading imports included automobiles, iron ore, coal, wheat and petroleum.

The merchant marine on June 30, 1946, had 66 vessels of 262,300 gross tons. In 1945, 6,011 vessels of 7,563,947 tons entered Portuguese ports. Railway mileage in 1945 was 2,191, and first and second class highways 9,180. Portugal is an important international air center.

Ordinary revenue in 1948 was estimated at 3,887,859,000 escudos, extraordinary revenue at 1,662,775,000, ordinary expenditure at 3,886,679,000 and extraordinary ex-

penditure at 1,662,775,000 also. The public debt (Dec., 1947) was 9,069,553,000 escudos. Portugal has been noted under the Salazar regime as one of the few nations with a regularly balanced budget.

Mineral resources have not been fully developed, but wolfram, coal, iron ore, copper, manganese, iron pyrites, lead, tin and other ores are found. The coal output in 1947 was 480,583 metric tons, manganese ore 2,444 tons and pyrites 388,827 tons. Wolfram, extremely important during World War II, totaled 3,300 tons in 1944.

Portugal is one of the world's leading producers of cork; exports in 1946 were 208,000 tons. The production of resin (1947: 53,543 metric tons) and of turpentine (41,561 tons) is also important.

The fishing industry is a basic part of the national economy, employing about 40,000 men and 15,800 boats in 1945. Of special importance is the sardine industry centered at Setúbal, south of Lisbon. The sardine catch in 1947 was 97,967 metric tons valued at 246,256,000 escudos.

TOPOGRAPHY AND CLIMATE. Portugal occupies a rectangular area about 360 miles long and 140 miles wide in the southwestern part of the Iberian Peninsula. It is crossed by many small rivers, and also by three large ones which rise in Spain, flow into the Atlantic, and divide the country into three geographic areas. The Minho (Miño in Spain) River, part of the northern boundary, cuts through a mountainous area that extends south to the vicinity of the Douro (Duero) River. South of the Douro the mountains slope to the plains about the Tagus (Tejo) River. The remaining division is the southern one of Alentejo.

The Azores, stretching over a distance of 400 miles in the Atlantic, consist of 9 islands divided into three groups, with total area of 888 square miles. The nearest continental land is Cape da Roca, Portugal, which lies 800 miles to the east. The Azores are an important station on Atlantic air routes, and both Britain and the United States established air bases there during World War II. Madeira, consisting of two inhabited islands, Madeira and Porto Santo, and two groups of uninhabited islands, lies in the Atlantic about 535 miles southwest of Lisbon. Total area of the Madeiras is 314 square miles.

Portugal's climate is equable and temperate, but in the deep valleys where the mountains keep out the cool winds from the Atlantic, it is excessively hot in summer. Lisbon, Coimbra and Oporto all have mean temperatures of 60° to 61.5°. Heavy fogs are common along the coast. Rainfall has been as great as 16 feet a year. It is heaviest in the north and on the Serra da Estrella.

PORTUGUESE COLONIAL EMPIRE

AFRICA

	Area, sq. mi.	Population, census 1940
Angola (Portuguese West Africa)	487,788	3,886,570*
Cape Verde Islands	1,539	181,489
Mozambique (Portuguese East Africa)	297,654	5,085,630
Portuguese Guinea	13,944	351,089
São Tomé and Príncipe Islands	372	60,490
ASIA		
Macao	5	340,260
Portuguese India	1,538	624,177
Timor	7,330	438,311*

*1947.

The status of the Portuguese overseas colonies is fixed by the Colonial Act of July, 1930, included in the constitution approved March 19, 1933. Each colony has a governor or governor general, appointed by the council of ministers for an initial 4-year term and responsible to the minister for the colonies at Lisbon. Each colony has financial and administrative autonomy.

ANGOLA (Portuguese West Africa)—Status: Colony.**Capital:** Loanda (population 77,130).**Governor general:** José Agapito da Silva Corvalho.**Foreign trade (1947):** exports, 981,012,000 escudos; imports, 962,074,000 escudos. Chief exports: coffee, diamonds.**Agricultural products (1947):** sugar (44,534 metric tons), cotton (13,433 tons), sisal (12,645 tons), coffee (exports 40,663 tons), corn, palm oil and kernels, groundnuts, rice.**Minerals:** diamonds (1947: 799,210 carats), lignite, copper.**Forest products:** beeswax, timber.**Industries:** sugar, palm oil, whale oil, fish oil.

Angola stretches along the west African coast for about 1,000 miles from Belgian Congo to the Cunene River. Outside of a coastal plain varying in width from 30 to 100 miles, the colony is part of the great African plateau. The Angola coast and the Congo River were explored by the Portuguese in 1482-85, and Loanda was founded in 1576. Agreements concluded with the Congo Free State, Germany and France in 1885-86 (later modified in details) fixed the limits of the province except in the southeast, where the frontier was determined by the Anglo-Portuguese agreement of 1891 and the arbitration award of the King of Italy in 1905. The governor general is assisted by a council of 10 (5 officials and 5 Portuguese nationals). There are 5 provinces.

Angola is primarily an agricultural country. Its varied altitude enables it to produce both tropical and temperate crops. Excellent grazing land exists in many parts of the colony, and there are more than 1,-

000,000 cattle. Railways total 1,477 miles, and primary roads 21,949 miles. The chief ports are Loanda and Lobito. The great majority of the population are of Bantu-Negro stock, mixed in the Congo district with the pure Negro. Europeans in 1947 numbered 56,000, and half-castes 30,500.

Mean annual temperature at Loanda is 74.3°; the cool season lasts from June to September, the wet from October to May.

CAPE VERDE ISLANDS—Status: Colony.**Capital:** Praia (population 6,188).**Governor:** João de Figueiredo.**Foreign trade (1945):** exports, 151,100,000 escudos; imports, 165,750,000 escudos. Chief exports: salt (6,907 tons), preserved fish (640 tons).**Agricultural products:** coffee, millet, castor oil, oranges, hides.

This group of 14 volcanic islands lying off the west African coast was discovered in 1456 by the Venetian captain Alvise Cadamosto, in the service of Prince Henry the Navigator. The island of São Vicente is an important coaling station on the South American route. The vast majority of the inhabitants are mulattoes (101,284 in 1943) and Negroes (51,070)—descendants of slaves brought to the islands from Africa by early settlers. Public slavery was abolished in 1854, and private slavery in 1876. Europeans in 1940 numbered 5,580.

Summer temperatures are high in the archipelago, ranging up to 90° near the sea. The rainy season lasts from August to October.

MOZAMBIQUE (PORTUGUESE EAST AFRICA)—Status: Colony.**Capital:** Lourenço Marques (population 68,223).**Governor general:** Gabriel Maurício Teixeira.**Foreign trade (1946):** exports, 966,000,000 escudos; imports, 1,127,000,000 escudos. Chief exports: cane sugar, copra.**Agricultural products (1946, in metric tons):** sugar cane (70,195), sisal (18,113), corn (32,944), cotton (unginned) (18,174), copra (43,289).**Minerals:** gold (1946: 5,787 oz.), coal, graphite, mica.**Forest products:** mangrove bark, timber.

Mozambique, stretching for about 1,430 miles along Africa's southeast coast, was discovered by Vasco da Gama in 1498, although the Arabs had penetrated into the area as early as the 10th century A.D. It was first colonized in 1505, and by 1510 the Portuguese were masters of all the former Arab sultanates on the east African coast. The boundaries with British Central and South Africa were delimited in 1891, and with Tanganyika Territory in 1886 and 1890. By the Treaty of Versailles, following World War I, Portugal was allotted the Kionga triangle, formerly part of German East Africa. One of the four provinces—Manica and Sofala (87,454 sq. mi.)—was

held by the Mozambique Company until 1942, when the Portuguese Government refused to renew its charter.

Agriculture is the chief industry. There are many large plantations, some of which are partially mechanized. Stockraising is hampered by prevalence of the tsetse fly.

Ninety-nine percent of the inhabitants are native Africans of the Bantu tribes. In 1945 there were 31,191 Europeans and 11,365 Asiatics. There are 1,349 miles of railway and 18,667 miles of road, mostly unimproved. The chief ports are Lourenço Marques and Beira, which is also the port for Rhodesia. The principal river, the Zambezi, divides the colony in half.

The cool season lasts from April to August, and the rainy season from December to March. On the central coast the mean annual temperature is about 85°.

PORTUGUESE GUINEA—Status: Colony.

Capital: Bissau (population 3,362).

Governor: Manuel Maria Sarmiento Rodrigues.

Foreign trade (1947): exports, 124,698,700 escudos; imports, 154,036,540 escudos. Chief exports (in tons): groundnuts (38,861), palm kernel oil.

Agricultural products: groundnuts, palm kernels, hides, rice.

Forest products: wax, timber.

This colony, lying on the west African coast and almost surrounded by French West Africa, was discovered in 1446 by the Portuguese Nuno Tristão and was separated from the colony of the Cape Verde Islands in 1879. It consists of a low-lying coastal region and 60 islands off the coast. The country is undeveloped economically, and most of the natives are farmers. There are no railways, but navigable rivers totaling over 1,000 miles are important trade arteries; there are also about 1,650 miles of roads. About two-fifths of the natives are Moslem; there were 1,419 Europeans in 1940. On the coast, temperature varies between 77° in January and 85° in May. The dry season lasts from December to May.

SÃO TOMÉ AND PRINCEPE—Status: Colony.

Capital: São Tomé.

Governor: Carlos de Sousa Gorgulho.

Foreign trade (1945): exports, 52,600,000 escudos; imports, 27,775,000 escudos. Chief exports: cacao, coffee.

Agricultural products: cacao, coffee, coconuts, copra, palm oil.

These volcanic islands, lying in the Gulf of Guinea about 150-175 miles off the west African coast, were discovered by the Portuguese in 1471. Most of the early inhabitants were convicts and Jews from Portugal and slaves from Brazil and the mainland, but the bulk of the present inhabitants are Negro contract laborers from the mainland and Cape Verde engaged to work cacao plantations.

MACAO—Status: Colony.

Capital: Macao (population 148,456).

Governor: Albano Rodrigues de Oliveira.

Chief exports: fish, cement, preserves.

Manufactures: cement, preserves, firecrackers, vegetable oils, metal products.

Macao comprises the peninsula of Macao and the two small islands of Taipa and Colôane on the south China coast, about 35 miles from Hong Kong. Established by the Portuguese in 1557, it is the oldest European outpost in the China trade, but Portugal's sovereign rights to the port were not recognized by China until 1887, and its boundaries are still not delimited. The port has been eclipsed in importance by Hong Kong, but it is still a busy distribution center, and also has an important fishing industry employing over 40,000 people. It is notorious for its opium trade and gambling houses. Portuguese number about 4,000.

PORTUGUESE INDIA—Status: Colony.

Capital: Panjim (Nova Góa) (population 12,000).

Governor general: Vacant since Sept., 1947.

Foreign trade (1944): exports, 35,580,000 escudos; imports, 167,087,000 escudos. Chief exports: fish, spices, copra.

Agricultural products: cashew nuts, coconuts, spices.

Minerals: manganese, salt.

The colony consists of Góa and 3 islands on the Malabar coast of India; Damão and the territories of Dadará and Nagar-Aveli, on the Gulf of Cambay; and Diu, with the continental territories of Gocola and Simbor, on the coast of Gujarat. Góa, captured in 1510 by the Portuguese, later became capital of the whole Portuguese empire in the east. The native population is largely Hindu.

TIMOR—Status: Colony.

Capital: Dili (population 7,000).

Governor: Oscar Freire de Vasconcelos Ruas.

Foreign trade (1940): exports, \$166,000; imports, \$145,000. Chief exports: coffee, sandalwood, wax, copra.

Agricultural product: coffee (exports 1947: 2,100 short tons).

Forest products: sandalwood, wax.

Portuguese Timor consists of the eastern half of the island of Timor in the Malay Archipelago, with the territory of Ambeno and two neighboring islands. It was first settled by the Portuguese early in the 16th century. In 1859 the island was divided between Portugal and the Netherlands; later boundary adjustments were made in 1904. Fishing and copra manufacture are important; trade is mostly in the hands of Chinese, Malaysians and Arabs. The colony was occupied by Dutch and Australian troops in Dec., 1941, and by the Japanese in Feb., 1942. Both occupations received strong Portuguese protest.

Rumania (Republic)

(România)

Area (est.): 91,934 square miles.

Population (census 1948): 15,872,624 (Rumanian, 85.7%; Magyar, 9.4%; German, 2.2%; Jews, 0.9%; others [Turkish, Ruthenian, Bulgarian, Gypsy, Ukrainian] 1.8%).

Density per square mile: 172.7.

Chairman of Presidium: Constantin Parhon.

Premier: Petru Groza.

Principal cities (est. 1945): Bucharest, 984,619 (capital); Cluj, 110,956 (Transylvanian industrial center); Jassy, 108,987 (trading center, Moldavia); Timisoara, 108,296 (western commercial center); Ploesti, 105,114 (oil).

Monetary unit: Leu.

Languages: Rumanian, Hungarian, German, Turkish.

Religions (est. 1946): Eastern Orthodox, 81%; Greek Catholic, 9%; Roman Catholic, 7%; others, 3%.

HISTORY. In World War I, Rumania joined the Allies and won enough land at the peace conference to double its size. In World War II, Rumania joined the Axis and lost about half its earlier gains. Its present size is about that of Oregon. Politically, it is dominated by the Soviets.

Most of Rumania was the Roman province of Dacia from about A.D. 100 to 275. From the 6th to the 12th centuries, wave after wave of barbarian conquerors—Vlachs, Bulgars and others—passed over the area. Of the two regions which eventually became Rumania, Walachia was taken by the Turks in 1411, and Moldavia in the 16th century, but both retained semi-autonomy. After the Russo-Turkish War, they went under *de facto* Russian protection in 1774.

The Treaty of Paris following the Crimean War nominally united the two provinces in 1858, and Alexander Cuza was elected Prince of Moldavia and Walachia. In 1866 he was forced to abdicate and was succeeded by Prince Carol of Hohenzollern-Sigmaringen. The Treaty of Berlin recognized Rumania's complete independence in 1878, and in 1881 the principality was elevated to a kingdom. Rumania's spoils from the Second Balkan War in 1913 included the Black Sea province of Dobruja. The following year King Carol I was succeeded by his nephew, Ferdinand. The gains of World War I, making Rumania the largest Balkan state, included Bessarabia, northern Transylvania and Bukovina. The Banat, a Hungarian area, was divided with Yugoslavia.

In 1926 Crown Prince Carol renounced his rights to the throne, and when King Ferdinand died on July 20, 1927, Carol's son, Michael (Mihal) became king under a regency. However, Carol returned from exile in 1930, was crowned King Carol II, and gradually became a powerful political

force in the country. On Feb. 10, 1938, he abolished the democratic constitution of 1923. On June 21, 1940, the country was reorganized along fascist lines, and the fascist Iron Guard became the nucleus of the new totalitarian party. On June 27, the Soviet Union occupied Bessarabia and northern Bukovina. By the Axis-dictated Vienna Award of Aug. 30, 1940, two-fifths of Transylvania went to Hungary. On Sept. 4, the king dissolved Parliament and granted the new premier, Ion Antonescu, full power, after which he abdicated and went into exile with his mistress, Magda Lupescu, whom he married in 1947 when she became gravely ill. The first official act of his son, Michael I, was to confirm Antonescu in his status as head of the state and premier. Rumania subsequently signed the Axis Pact on Nov. 23, 1940, and the following June joined in Germany's attack on the U. S. S. R., reoccupying Bessarabia. Following the invasion of Rumania by the Red Army in Aug., 1944, King Michael led a coup d'état which ousted the Antonescu government. The new cabinet, headed by Constantin Sanatescu, included Socialist and Communist representatives. An armistice was signed Sept. 12 in Moscow.

Sanatescu was replaced on Dec. 6, 1944, by Nicolai Radescu, who in turn yielded on March 6, 1945 to Petru Groza. The latter formed a cabinet made up of members of the National Democratic Front (NDF), a political group formed by Communists, Social Democrats and subsidiary parties. Two opposition members were added to the cabinet Jan. 7, 1946, as one result of the Moscow Conference of Foreign Ministers, and on Feb. 5 the U. S. and Britain recognized Rumania conditional upon the holding of free elections. Elections, held Nov. 19, 1946, resulted in a victory for the Communist-dominated government bloc headed by Groza, who was reappointed premier with an all-NDF cabinet on Nov. 29. Rumania was under complete Soviet political and economic domination. King Michael abdicated on Dec. 30, 1947, and thereafter the nation was declared a "people's republic." Elections held on March 28, 1948, gave 405 of the 414 seats in the National Assembly to the Communist-dominated government bloc.

GOVERNMENT. The National Assembly on April 13, 1948, adopted a Soviet-type republican constitution, under which virtually all the powers formerly vested in the king are exercised by a five-member state presidium. Executive power is vested in the cabinet, and legislative power in the unicameral National Assembly of 414 members.

PEACE TREATY OF 1947. The Paris peace treaty ratified on Sept. 15, 1947, confirmed the *de facto* cession to the Soviet Union of

Bessarabia and northern Bukovina, the return to Rumania from Hungary of northern Transylvania (thus annulling the Vienna Award of 1940) and the cession of southern Dobruja to Bulgaria. In addition, Rumania was required to pay reparations in kind in the amount of \$300,000,000 to the Soviet Union over a period of eight years. She also was to make compensation in lei to the amount of two-thirds of the original value of Allied property damaged or destroyed in Rumania.

The treaty limited the strength of the Rumanian armed forces as follows: army 125,000 men, navy 5,000 men and tonnage of 15,000, air force 8,000 men and 150 planes. The Soviet Union has the right to maintain line-of-communication troops in Rumania until a treaty with Austria becomes effective. The armed forces are being reorganized and re-equipped with Soviet assistance.

SOCIAL AND ECONOMIC CONDITIONS. Education is free and compulsory. There are four universities—at Bucharest, Jassy, Cluj and Timisoara. Students in 1945 were 27,082. The state Church, governed by a Holy Synod, is Eastern Orthodox.

Rumania is predominantly agricultural, with about 80 percent of the population engaged on the soil. In wheat, rye and other grains, it is one of the richest countries of southeastern Europe. In 1946 the largest acreage was devoted to corn (production: 1,004,000 metric tons) and wheat (1,608,000 tons). Other crops are flax, hemp, fruit, vegetables, potatoes, sugar beets, sunflower seeds, tobacco and grapes. Stockraising is also important. In 1947, there were 3,047,964 cattle, 7,084,633 sheep and 1,405,726 hogs. Wool production in 1946 was 16,200 tons.

Agrarian reform measures effected in 1945 provide for the distribution of estates over fifty hectares (123.6 acres) in lots of twelve and one half hectares to each peasant. Collectivization was not included in the program, but all cattle and implements became the outright property of the State, for lease to farmers.

The chief industries—flour milling, brewing and distilling—are directly connected with agriculture. However, the iron, steel, metal and machinery industries expanded considerably after the initiation of the rearmament program in 1935. In 1942 there were 2,250 industrial establishments with an output of 162,758,000 lei. The most important by value were food processing, textile, metal, chemical, wood and paper. Most of Rumania's industry is now under complete state control.

Exports in 1944 totaled 32,175,770,000 lei and imports 30,016,077,000 lei. Principal exports are ordinarily petroleum products, cereals and cereal products, wood and wood products. Leading imports are iron and

manufactures, machinery and motors, vegetable fibers and products.

The Danube, flowing along the southern border for more than 200 miles, is a highly important commercial artery. Transshipment between seagoing vessels and river barges is made at Galati and Braila. The Rumanian Sea and River Navigation Company, with one-fourth of its capital furnished by the U. S. S. R. and three-fourths by Rumania, monopolizes river and sea transport. The principle of freedom of navigation on the Danube for all nations was recognized in the 1947 peace treaty. The principal seaport is Constanta.

Railway and highway mileages in 1945 were 5,962 and 43,163 respectively. The Sovrom Civil Aviation Company, under Soviet management but financed equally by the U. S. S. R. and Rumania, has the monopoly for all civil air transport inside Rumania and to the Black Sea.

The 1947-48 budget balanced at 102,900,-000,000 lei. Inflation continued to be serious, and on Aug. 15, 1947, the leu was stabilized at the rate of one new leu to 20,000 old. The national debt rose to 124,-960,000,000 lei in March, 1946.

By far the most valuable of Rumania minerals is oil, produced chiefly in the Floesti region about 35 miles north of Bucharest. In 1939 the output was 45,600,-000 barrels, valued at \$45,464,450, about 2 percent of the total world production. In 1947, production was about 28,500,000 barrels.

Natural gas from Transylvania is the second most important mineral, coming to 1,774,000,000 cubic meters in 1945. Other important minerals are iron ore (1943: 300,100 tons); lignite (1944: 2,500,000 tons), copper ore, gold and silver. The Russo-Rumanian Oil Company controls all former German oil firms and has a monopoly on new exploitation.

Fisheries on the lower Danube and wood production are also important.

TOPOGRAPHY AND CLIMATE. The Carpathian Mountains divide Rumania's upper half from north to south and connect near the center of the country with the Transylvanian Alps, running east and west. North and west of these ranges lies the Transylvanian plateau, and to the south and east are the plains of Moldavia and Walachia. In its last 190 miles, the Danube River flows through Rumania only.

The Moldavian-Walachian region has hot summers and extreme frosts and blizzards in winter. Variations are less extreme in Transylvania and the Banat. Bucharest's average summer temperature is 72°; winter 27°. In some winters the Danube is ice-bound for as long as three months. Rainfall, heaviest in summer, averages 15-20 inches annually.

El Salvador (Republic)

(República de El Salvador)

Area: 13,176 square miles.

Population (est. 1947): 2,072,506 (mestizo, 78%; Indian, 11%; white, 11%).

Density per square mile: 157.2.

President: Salvador Castañeda Castro.

Principal cities (est. 1947): San Salvador, 127,406 (capital); Santa Ana, 101,559 (coffee, sugar); Nueva San Salvador, 38,648 (trading center).

Monetary unit: Colón.

Language: Spanish.

Religion: Roman Catholic.

HISTORY AND GOVERNMENT. El Salvador is the smallest, most densely populated of Central American nations, and the only one without an Atlantic coast line.

Pedro de Alvarado, a lieutenant of Cortez, conquered El Salvador in 1525. The area was administered as part of Guatemala until the general Central American revolution against Spain in 1821. El Salvador struck out as an independent republic in 1839 after the dissolution of the Central American Union. Its story since then has been largely one of revolution and strife.

In Jan., 1931, the first free election in 20 years brought in Arturo Araujo as president. He was overthrown before the year was over. General Maximiliano Hernández Martínez, his successor, remained in power until May, 1944, when a general strike forced his resignation. The next regime, also militarist-led, lasted only five months, and was succeeded March 1, 1945, by the present government.

The constitution provides for a president, popularly elected for four years and normally ineligible to succeed himself; also, a one-house legislature of 42 members. The military forces include an army limited to 3,000, a militia, a national guard and a small air force.

SOCIAL AND ECONOMIC CONDITIONS. With the second lowest illiteracy rate in Central America, El Salvador provides free and compulsory education; both public and private schools are state-controlled. Primary schools in 1945 numbered 1,519 with about 100,000 students; intermediate schools, about 50 in 1944 with 4,207 students. The national university had 935 students in 1946.

The majority of the population is mixed white and Indian, but the governing class is composed chiefly of the white group of Spanish colonial origin.

El Salvador probably is the most intensely cultivated of Latin American nations, with more than 80 percent of its land planted. Coffee, which accounts for 85 percent of total exports (1947 production: 1,410,995 quintals), is controlled in

volume by a commission of government officials and planters. Corn, sugar, beans, rice, tobacco, cacao, indigo, millet and sisal fiber are other products. There is some cattle raising and a few local factories, including a monopoly on henequen bags for coffee.

Exports in 1947 totaled \$40,058,780, and imports \$36,931,175. Approximately 75 percent of the trade is with the U. S.

The two railways have approximately 375 miles of track. All-season highways total 1,436 miles, with an additional 2,300 miles of unimproved roads.

The 1948 budget estimated expenditures at \$23,081,028, and revenue at the same amount. The foreign debt on Dec. 31, 1947, was \$10,881,690. British investments on Dec. 31, 1947 were £1,698,690; U. S. direct investments in 1940, \$11,204,000.

Gold, silver, coal, copper, iron, zinc, mercury and sulfur are the nation's chief minerals. Gold production in 1947 (10,755 troy oz.) was valued at \$358,250, silver production (285,893 fine oz.) at \$193,742. Forest resources, much smaller than in other Central American states, include dyewood, mahogany, cedar and walnut. El Salvador is a leading source of balsam.

TOPOGRAPHY AND CLIMATE. Most of El Salvador is a fertile volcanic plateau about 2,000 feet high. It has several volcanoes, some still active, and many lovely crater lakes. One of these, Lake Ilopango, is a landing place for seaplanes. The mountain ranges along the borders of Guatemala and Honduras give the highlands an almost temperate climate, but the lowlands are often hot and sultry. Temperatures at San Salvador range from about 59° (average daily low) in January to 85° (average daily high) in December; these are the two coolest months. The rainy season lasts from May to October.

San Marino (Republic)

Area: 38 square miles.

Population (1939): 14,547 (mostly Italian).

Density per square mile: 382.8.

Executive: Two regents selected every six months by the Grand Council.

Principal town: San Marino (est. pop. 2,000) (capital).

Monetary unit: Lira.

Language: Italian.

Religion: Roman Catholic.

San Marino, the oldest and smallest republic in the world, is one-tenth the size of New York City. It has no public debt, no wealth, no poverty, and is entirely surrounded by Italy, in the Apennines near Rimini. According to tradition, San Marino was founded about A.D. 350 and had

good luck for centuries in staying out of the interminable wars and feuds on the Italian peninsula. The Pope recognized its independence in 1631.

San Marino hires its police and judges from Italy. It no longer confers titles for a consideration, but it does derive much revenue from the exporting of its postage stamps, which are changed often to keep philatelists buying. Other exports are barley, wine and cattle, as well as building stone from Mount Titano.

Executive power is exercised by regents, two of whom are appointed every six months from the popularly-elected Grand Council. There are several primary schools and a high school.

San Marino is linked with Rimini on the Adriatic by a 20-mile electric railway.

Siam (Kingdom)

(Muang Thai)

Area: 198,247 square miles.

Population (census 1947): 17,325,699* (1937: Thai, 90%; Chinese, 3.4%; Indian and Malayan, 3.4%; others, 3.2%).

Density per square mile: 87.4.

Ruler: King Phumiphon Aduldet (under regency).

Prime minister: Luang Pibul Songgram.

Principal cities (census 1947*): Bangkok (Krung Thep), 884,197 (chief port, commercial center); Khonkaen, 590,664 (trading center); Chiangmai, 534,628 (rice, teak); Chiang Rai, 481,621 (Northern trading center).

Monetary unit: Baht.

Languages: Siamese, Chinese.

Religions (census 1937): Buddhist, 95%; Moslem, 4.3%; Christian and others, .7%.

*Provisional figures. †Including about 2,500,000 of Chinese descent born in Siam.

HISTORY. The Siamese first began moving down into their present homeland from the Asiatic continent in the 6th century A.D., and by the end of the 13th century ruled most of the western portion. During the next 400 years the Siamese fought sporadically with the Cambodians to the east and the Burmese to the west. The British obtained recognition of paramount interest in Siam in 1824, and in 1896 an Anglo-French accord guaranteed Siamese independence. In 1909 Siam renounced claims to suzerainty over four Malayan states in return for almost complete cessation of British interference in Siamese internal affairs. Siam declared war on the Central Powers in 1917.

A coup on June 24, 1932, changed the absolute monarchy into a representative government with universal suffrage. Thus shorn of much power, King Prajadhipok abdicated in March, 1935, in favor of his nephew, Prince Ananda Mahidol. After five

hours of token resistance on Dec. 8, 1941, Siam yielded to Japanese occupation and became one of the springboards in World War II for the Japanese campaign against Malaya. After the fall of its pro-Japanese puppet government in July, 1944, Siam pursued a policy of passive resistance against the Japanese, and on Aug. 16, 1945, after the Japanese surrender, Siam repudiated the declarations of war it had made against Britain and the U. S. in 1942.

By a treaty signed with Britain and India Jan. 1, 1946, Siam renounced all wartime acquisitions of Malayan territory and agreed that no canal linking the Gulf of Siam with the Indian Ocean would be cut across Siamese territory without British concurrence. A Franco-Siamese agreement of Nov. 17, 1946, provided for the return to Indo-China of a border area ceded to Siam by Vichy France in 1941.

Luang Pibul Songgram, prime minister during the Japanese occupation, seized power in a bloodless coup on Nov. 9, 1947, and although his party was defeated in elections for the Constituent Assembly on Jan. 29, 1948, he retained office except for a few weeks from Feb.-April, 1948.

King Phumiphon Aduldet, born Dec. 5, 1927, second son of Prince Mahidol of Songkhla, succeeded to the Siamese throne on June 9, 1946, when his brother, King Ananda Mahidol, died of a gunshot wound. A regency council was named to serve until the king reaches majority.

The U. S. formally recognized Premier Luang Pibul Songgram's new government on May 3, 1948. Britain, China, Denmark and the Netherlands had already done the same on May 1-2.

GOVERNMENT AND DEFENSE. Siam is a constitutional hereditary monarchy. Under a new constitution promulgated in 1946, legislative power is exercised by a popularly-elected bicameral Parliament whose upper and lower Houses comprise 80 and 178 members respectively. The king exercises executive power through a state council of 14 to 24 members headed by the prime minister. A new constitution was being drafted by the constituent assembly in 1948.

The 1937 defense act made military service compulsory for a period of two years between the ages of 18 and 30. The army had 30,000 regulars in 1940, and there was a fair-sized air force. On Jan. 1, 1948, the navy had four coast defense ships, one destroyer, four submarines and other small craft.

SOCIAL AND ECONOMIC CONDITIONS. Buddhist monasteries throughout Siam control most of the elementary education in rural districts. In 1942 there were 19,743 primary and secondary schools with 2,620,207 pupils. The two universities had an enrollment of 11,525 students in 1937.

Almost 90 percent of the Siamese work at agriculture. Rice (1945: 3,699,322 metric tons) is the principal crop, the staple food and the leading export. It is the basis of Siam's whole economy and the key to its prosperity. Next most important crop is rubber (1946-47: 45,950 short tons). Other products include coconuts, corn, tobacco, cotton, sesame, sugar cane and soybeans. Livestock, poor in quality and quantity, is used mainly for hauling. Manufacturing is of little importance, except for native handicraft and food processing.

Exports, largely rice and rubber, were 456,082,000 baht in 1946 and included teak, other woods and some tin. Imports were 549,213,000 baht, including cotton textiles, foodstuffs, oil, machinery and electrical appliances. Domestic business is largely controlled by Chinese.

Siam has good water routes which handle about 80 percent of all internal traffic. Bangkok, the chief port, 25 miles up the Chaopaya River from the Gulf of Siam, handles about 80 percent of the foreign trade. Railways under government ownership total about 2,040 miles. In 1939 there were about 3,633 miles of highway. With 14 international airlines using its facilities in 1948, Bangkok is rapidly becoming the hub of commercial aviation in southeast Asia.

In the 1946 budget, expenditures were estimated at 507,020,000 baht and revenue at 509,000,000 baht. The public debt in 1946 was 111,823,000 baht internal and £4,923,188 external. Siam joined the sterling area in Sept., 1947.

Siam has small deposits of many important minerals, and some precious stones. Only tin, gold, tungsten and salt are in commercial production. Tin output in 1940 was 20,841 tons (10% of the world total), but production was only 1,550 short tons in 1947.

The main forest product, taken from the northern hill country, is teak, worked by British companies. Others are thingan wood, ironwood, ebony and rattan.

Fisheries, both ocean and river, ordinarily rank second to agriculture in product value. The average catch of 40,000 tons includes mainly mackerel, as well as anchovies, mollusks and shellfish.

TOPOGRAPHY AND CLIMATE. Siam, more than two-thirds the size of Texas, supports most of its population in the central alluvial plain which is drained by the Chaupaya River and tributaries. The climate is monsoonal, but the full force of the monsoons is broken by the western frontier hills. Rainfall decreases from south to north. Humidity is always high, but temperatures fall as low as 40° in the November-February cool season. Inland temperatures often rise to 100° during the hot season.

Spain (Nominal Monarchy) (España)

Area: 194,945 square miles.

Population (est. 1948): 27,761,487 (Spanish, Basque, Catalan).

Density per square mile: 141.1.

Chief of State: Francisco Franco y Bahamonde.

Principal cities (est. 1948): Madrid, 1,203,067 (capital); Barcelona, 1,141,592 (chief port, textiles); Valencia, 582,553 (silk, oranges); Seville (Sevilla), 394,075 (wines, iron ore); Saragossa (Zaragoza), 302,365 (rail center); Málaga, 284,215 (seaport).

Monetary unit: Peseta.

Language: Spanish, Basque, Catalan.

Religion: Roman Catholic.

HISTORY. Spain, twice the size of Oregon and once one of the world's great powers, is somewhat of an outcast among nations today. The Franco dictatorship, helped substantially by Hitler and Mussolini, won control of the country in the civil war of 1936-39, and then, by staying nominally neutral in World War II, managed to survive the defeat of the Nazi-Fascist powers. The survival, however, was not without its cost. Spain today is the only non-enemy state of World War II specifically barred from international councils.

From 201 B.C. to A.D. 406, Spain was part of the Roman Empire. Then the Goths and the Vandals formed a powerful kingdom, which was partially conquered in the 8th century by the Moors from Africa. The last Moorish stronghold, the kingdom of Granada, fell to the forces of King Ferdinand and Queen Isabella, who were trying to unify Spain, in 1492. In the same year, the Spanish-financed explorer Christopher Columbus was discovering the new world for the Spanish crown.

Charles V (1516-55) became King of Spain and also Holy Roman Emperor. Under his son, Philip II, Spain reached the peak of its power, but the beginning of decline set in with Britain's defeat of the "Invincible" Armada in 1588.

The line of Spanish Hapsburgs ended in 1700, and the War of the Spanish Succession followed. By the Treaty of Utrecht (1713) Spain was forced to accept a Bourbon king, the Duke of Anjou, and lost Gibraltar and all holdings in the Netherlands and southern Italy. Then, while the Spaniards were resisting Napoleon's efforts to establish a Bonaparte line in Spain, most of their colonies in America revolted and became independent. The loss of Cuba, Puerto Rico and the Philippines in the Spanish-American War of 1898 left Spain with only a few scattered possessions in Africa. Neutrality was maintained during World War I.

From 1923 to 1930 Spain was a military dictatorship under General Miguel Primo de Rivera. A wave of republicanism in

1931 forced the abdication of King Alfonso XIII, and a new constitution was drawn declaring Spain to be a workers' republic. Several revolts, strikes and shifts of government kept Spain in political chaos, and on July 18, 1936, the army revolt led by General Francisco Franco burst into civil war. While Hitler and Mussolini helped Franco, Russia helped the Loyalist side. The last Loyalist forces surrendered on March 29, 1939. Spain became a dictatorship under Franco and signed the anti-Comintern pact in 1939.

While Franco shied away from the risk of becoming a belligerent in World War II, he was pro-Axis in sympathy, helped the Axis with supplies, intelligence and services to German U-boats, and even sent the Spanish Blue Division to fight Russia.

Meanwhile, monarchist sympathies remained strong both in and out of Franco's Falange party, and a Spanish Republican "Government-in-exile" was formed in 1945. Yet Franco's position remains strong.

GOVERNMENT. Franco is head of the state, national chief of the Falange party, prime minister and *caudillo* (leader) of the empire. Practically, the country is ruled by the cabinet (appointed by Franco), the National Council of the Falange party and, to a lesser extent, the Cortés (parliament). The principal function of the Cortés is the planning and formulation of laws without prejudice to Franco's veto power. Cabinet ministers, party officials, civil governors, university heads, and the presidents of learned bodies become members of the Cortés ex-officio. There is no provision for the introduction of legislation by any of the 238 members.

In a referendum held July 6, 1947, the Spanish people approved a Franco-drafted succession law declaring Spain a monarchy again. Franco, however, is to continue as chief of state and upon his death or incapacity the Government and a Council of the Realm constituted by the law are to nominate as king "that person of royal blood who is most qualified by right," subject to the approval of the Cortés. The law reserves to Franco the right to nominate his own successor, subject also to the Cortés approval by two-thirds vote.

DEFENSE. Franco is commander in chief of the army, navy and air force, each administered by a cabinet minister responsible to him. Military service is compulsory for a period of two years. The standing army, estimated at 450,000 men, is divided into 22 divisions in Spain and four in Morocco. Planes in service (about 950) are predominantly German and Italian. The air force in 1940 had 100,000 men and 50,000 reserves. The navy in 1948 had 6 cruisers, 16 destroyers, 8 submarines, 6 mine layers and 7 sloops with a tonnage of 83,000. Under construction were 20 de-

stroyers, 4 sloops and 7 fleet mine sweepers. The budgetary allotment for defense is 39 percent.

EDUCATION, RELIGION AND SOCIAL POLICIES. The illiteracy rate was 42.35 percent in 1943. Primary education is compulsory and free; religious instruction is permitted. In 1944 there were 44,585 primary public schools with 3,990,214 pupils, 118 secondary schools with 178,470 students (1946), 54 normal schools with 19,349 students, and 12 universities with 43,498 students enrolled in 1945.

Roman Catholicism is the established religion. After the civil war of 1936-39, the church was restored to substantially its pre-republican position; confiscated property was returned, religious education was reintroduced, and divorce was suppressed.

The labor charter promulgated March 9, 1938, defined Spain as a totalitarian and syndicalist state. So-called vertical syndicates have supplanted all union organizations and all other organizations for the protection of the economic interests of productive groups. A branch of production extends "vertically" from the raw material stage through the industries and firms engaged in processing and marketing. Prices, wages and production, and the distribution of merchandise are controlled.

AGRICULTURE. Spain is predominantly agricultural, although there are extensive non-arable areas. The principal land uses, apart from forest, pasture and forage crops, are the production of grain, potatoes, pulse, sugar beets, oranges, grapes and olives. Since the civil war Spain has not recovered balance in production and consumption of foodstuffs. Normally, Spain produces exportable quantities of oranges, lemons, almonds, filberts, raisins and other subtropical commodities. Wine production in 1947 was about 607,000,000 gallons.

PRINCIPAL CROPS (thousands of metric tons)

	1931-35 average	1945	1946*
Wheat	4,364	1,680	3,623
Barley	2,394	711	1,913
Rye	551	229	476
Corn	709	472	610
Oats	670	224	619
Oranges	1,043	800*	475

*Estimated.

Livestock, also important, included 4,100,000 cattle, 23,800,000 sheep, 6,100,000 goats and 5,150,000 hogs in 1944.

INDUSTRY. The textile industry, concentrated in Catalonia and normally employing over 300,000 workers, leads all others. Manufacture of paper is also important. In 1942, more than 500 companies made electrical goods valued at 500,000,000 pesetas, and the value of the output of the

growing chemical industry was about the same. Pig iron production in 1947 was 502,-684 metric tons, and steel production 540,-837 tons. On March 31, 1948, 54 ships of 104,475 tons were under construction.

TRADE. Statistics of foreign trade are as follows, in millions of U. S. dollars:

	1945	1946	1947
Exports	286	265	306
Imports	282	302	396

In 1945, 52 percent of the exports were food products, 26.5 percent raw materials and 20 percent manufactures. Of the imports, 47 percent were raw materials, 35 percent manufactures and 15 percent food products. Leading exports are oranges, olive oil, hides and skins, cork and wine; leading imports are cotton, machinery, coffee, wood and vehicles.

COMMUNICATIONS. The merchant fleet, which suffered severely during the civil war and World War II, comprised 986 vessels of 1,130,004 gross tons on June 30, 1947. The national highway system is about 80,000 miles. In 1944 there were 7,932 miles of normal gauge and 2,955 miles of narrow gauge railways; 825 miles were electrified.

FINANCE. The budget for 1948 calculated government expenditure at 15,196,000,000 paper pesetas, and revenues at 15,115,000,-000 paper pesetas. The air force, army, navy and government (police) departments received 38.8 percent of the total appropriations. The public debt in 1946 was 43,977,876,000 pesetas. Deficit financing, the enormous cost of reconstruction and World War II contributed to persistent inflationary tendencies in 1939-48. The note issue of the Bank of Spain, amounting to 9,300,000,000 pesetas in July, 1940, was up to 25,100,000,000 pesetas by Apr., 1948.

MINERALS. Spain's mineral wealth, second to agriculture in the national economy, yields millions of tons of ore. In 1945 the mining industry employed 209,085 workers, and its output was valued at 4,214,047,846 pesetas. Following are production figures for 1946, in short tons: coal (11,649,200), pig iron and ferro-alloys (539,690), steel ingots and castings (659,650), copper (nine months, 72,610), iron ore (1947) (1,820,-076), lead (nine months, 22,778), mercury (1,558). Spain also produces important quantities of iron pyrites, potash ore, zinc ore, phosphates, manganese, cobalt, sulfur, silver and gold.

FORESTS AND FISHERIES. Spanish forests yield lumber, pine resins, cork and esparto. The 1945 cork output was about 40,000 tons. In 1942 Spain produced 15,432 tons of crude resin, 11,023 tons of processed resin oil and 3,307 tons of turpentine oil.

More than 100,000 persons work in the fishing, canning and related industries. The

1945 catch, principally cod, tunny and sardines, was 592,920 metric tons valued at 1,275,468,000 pesetas.

TOPOGRAPHY. Spain, less than ten miles from Africa at the closest point, and separated from France by the Pyrenees, is generally a broad plateau sloping to south and east and crossed by a series of mountain ranges and river valleys. Most of the coast line is steep and rocky, with few indentations. The best harbors are on the Galician coast in the north; the broadest coastal plain is on the Gulf of Cádiz in the southwest. The Guadalquivir River in the south is navigable to Seville, but most of the others are mountain streams useful only for waterpower. Hydroelectric stations account for 75 percent of Spain's generating capacity.

CLIMATE. Most of Spain's weather is extreme. Madrid, for example, reaches a high of 110° and a low of 10°. In the southeast, the protection of the Sierra Nevadas makes the climate subtropical. The northeast, with climate much like that of the British Isles, is the only region with normal rainfall. In the east and southeast, irrigation is requisite to farming.

OUTLYING ISLANDS. Off Spain's east coast in the Mediterranean are the Balearic Islands, which total 1,936 square miles. The largest is Majorca (1,405 sq. mi.). Sixty miles west of Africa in the Atlantic are the Canary Islands (2,894 sq. mi.).

SPANISH COLONIAL POSSESSIONS

Country	Area, sq. mi.	Population, est. July 31, 1944
Ceuta, Melilla, Alhucemas, Chaffarinas, and Peñon Velez	82	145,000
Spanish Morocco	7,589	1,082,009*
Spanish Guinea	10,900	171,000
Western Sahara, including Ifni and Spanish Sahara	116,200	72,000

*1948.

SPANISH MOROCCO: see MOROCCO

Sweden (Kingdom)

(Sverige)

Area: 173,341 square miles.

Population (est. 1948): 6,842,046 (practically all Swedish).

Density per square mile: 39.5.

Sovereign: King Gustav V.

Prime Minister: Tage Fritiof Erlander.

Principal cities (est. 1948): Stockholm, 703,-279 (capital); Göteborg, 337,474 (chief port, shipbuilding); Malmö, 181,280 (seaport); Norrköping, 81,902 (textiles); Helsingborg, 70,034 (Baltic seaport).

Monetary unit: Krona.

Language: Swedish.

Religions: Swedish Lutheran, 99%; others, 1%.

HISTORY. Sweden, one of the most progressive states in social welfare, maintained a precarious neutrality during World Wars I and II and suffered from being virtually cut off from world markets by British and German blockades. On the other hand, nearly everything that Sweden had to sell after 1939 was eagerly taken by one side or the other, subject only to the difficulties of delivery. As a result, Sweden has been able to follow an independent course, leaning toward the West but still cooperating economically with the Soviet Union and its satellites.

Although the ancestors of today's Swedes lived in the area as long as 5,000 years ago, little is known of Sweden before the 10th century. Before 1100, King Olaf Skötkonung had united Sweden into a strong nation and established Christianity. In 1397 Sweden was united with Norway and Denmark under the Union of Kalmar. After the murder of several prominent Swedes by Christian II of Denmark in 1520, Sweden revolted under the leadership of Gustavus Vasa. Gustavus, elected king in 1523, founded the modern Swedish state and was the first European monarch to break relations with the Pope.

By the Treaty of Westphalia (1648) which concluded the Thirty Years' War (during which Gustavus Adolphus scored a number of brilliant military successes), Sweden acquired important German areas, including large portions of Pomerania. In 1700, Poland, Denmark and Russia united against Sweden. When peace was finally concluded in 1721, Sweden gave up Livonia, Estonia, Ingria and parts of Finland. Sweden participated in the coalition against Napoleon (1805-07) but in 1809 Finland was lost to Russia. Following the ouster of King Gustavus IV in 1809, a constitutional law still in effect was adopted, after which Charles XIII, uncle of Gustavus IV, was elected king. Since Charles XIII was childless, one of Napoleon's marshals, Jean Bernadotte, was elected Crown Prince and took over effective control of the government, succeeding to the throne in 1818 as Charles XIV. By the Treaty of Kiel (1814), Sweden acquired Norway from Denmark in return for Pomerania. The union with Norway lasted until 1905, when it was peacefully dissolved.

Neutrality was maintained through both World Wars. In 1936 Per Albin Hansson formed a Social Democratic ministry which gave way on Dec. 12, 1939, to a national coalition cabinet under his leadership. On July 31, 1945, another wholly Social Democratic cabinet was formed by Hansson, who died in 1946 and was succeeded as prime minister by Tage Fritiof Erlander.

SOVEREIGN. Gustavus V, born June 16, 1858, succeeded to the throne Dec. 8, 1907. He was married in 1881 to Princess Vic-

toria (born 1862, died 1930), daughter of Friedrich, Grand Duke of Baden. Crown Prince Gustavus Adolphus, born Nov. 11, 1882, married (1) 1905, Princess Margaret Victoria (born 1882, died 1920); (2) 1923, Princess Louise Mountbatten (born 1889). To his first marriage was born Prince Gustavus Adolphus (born April 22, 1906, killed in air crash Jan. 26, 1947), who was married in 1932 to Sibylle, Princess of Saxe-Coburg-Gotha; their offspring include a son, Carl Gustavus, born April 30, 1946, and four daughters.

GOVERNMENT. Sweden is a limited monarchy. Executive and judicial authority is vested in the king alone, but his resolutions must be taken in the presence of the Council of State (cabinet), headed by the prime minister; the Council is appointed by the king but is responsible collectively to the Riksdag (parliament).

The Riksdag has an upper chamber of 150 members elected indirectly by the provincial and municipal councils for eight years, one-eighth being renewed each year. The lower chamber of 230 members is directly elected by popular vote for four years. There is universal suffrage for men and women over 21. The king has the right to initiate legislation and has an absolute veto over all bills except those relating to taxation.

Standings in the lower chamber (elections of Sept. 19, 1948, preliminary results): Social Democrat 112, Conservative 22, Agrarian 30, Liberal 57, Communist 9.

DEFENSE. Military service is compulsory from the ages of 20 to 47; the initial training period is 15 months. The king is commander in chief of all the armed forces. The army, numbering about 60,000, with a trained reserve of 600,000, is well-equipped with the latest type weapons, many of them developed in Sweden. The air force has 500 planes. The navy on Jan. 1, 1948, had 4 cruisers, 7 coast defense ships, 27 destroyers and large torpedo boats, 26 submarines, 2 minelayers and numerous smaller craft. Naval personnel numbers about 10,000 in addition to coast artillery, under naval jurisdiction.

EDUCATION. Public elementary education has been free and compulsory since 1842. In 1944 there were 533,890 pupils in the regular elementary schools and, in 1946, 63,826 students in secondary schools. The two universities—Uppsala and Lund—and three other schools of university grade had a total enrollment of 9,132 in 1946. The state also provides a large number of special vocational and continuation schools. The national church is the Swedish Lutheran Church, of which the King is supreme administrator.

SOCIAL WELFARE. The extremely well-developed cooperative movement is a powerful factor in the country's economic

life. The cooperatives account for about 10 percent of the total retail trade and more than 20 percent of the grocery business. Social legislation, also well-advanced, includes unemployment relief, loans and grants for housing, medical care, care of the indigent and the aged, and a public works program to curtail unemployment. The federation of trade unions had 1,147,015 members in 1947—about one-sixth of the population.

AGRICULTURE. Grain, hay, potatoes and sugar beets are products of the broad fertile plains of the south; cattle raising and dairy farming predominate in the north. Production of major crops in 1946 was as follows, in metric tons: wheat, 380,900; barley, 182,800; oats, 782,800; rye, 289,100; sugar beets, 1,789,700; potatoes, 1,943,200. The 1946 livestock census showed 593,000 horses, 2,869,000 cattle, 482,000 sheep and 1,165,000 hogs. Butter production in 1944 was 88,054 metric tons; cheese, 28,525 tons.

INDUSTRY. Industrial establishments in 1943 numbered 20,907 with 598,165 workers. The highly specialized machine industry produces separators, motors, electrical machines and apparatus, agricultural machinery, ball bearings, telephone equipment and harbor works. Pig iron production in 1947 totaled 697,850 metric tons, and steel ingots and castings, 1,190,514 tons. There are also large woolen, glass and porcelain industries. Shipyards build for both Swedish and foreign fleets; 60 ships of 241,980 tons were under construction on June 30, 1948. The timber and wood-working industries are extensive. The match industry is a single trust which covers the whole world and, with the help of British and American capital, monopolizes production in many countries.

TRADE. Statistics of foreign trade are as follows, in billions of kronor:

	1938	1946	1947
Exports	1.84	2.55	3.24
Imports, c.i.f.	2.09	3.40	5.18

Leading exports in 1947 were paper pulp (27%), cardboard and paper (14%), wood (10.7%), iron ore (5.8%) and ships (3.7%). Leading customers were Great Britain (15%), the U. S. (10.7%), Norway (7.5%), Belgium (6.6%) and the Netherlands (5.9%). Leading suppliers were the U. S. (31%), Britain (8.4%), Belgium (5.2%), Argentina (4.1%) and Switzerland (4.0%). Dwindling dollar reserves forced Sweden to curtail U. S. purchases in 1948.

COMMUNICATIONS. On Jan. 1, 1948, the merchant marine comprised 2,124 ships (of more than 20 tons) with a gross tonnage of 1,907,149, largely motor vessels. The highly developed railway network totaled 10,384 miles in 1945. In 1943 there were 55,-

550 miles of road, mostly improved. By means of ferry steamers, Swedish state railways are connected directly with both Germany and Denmark. Telephones in 1945 numbered 1,168,000 (177 per 1,000 persons), making the telephone system second only to the United States on a per capita basis. Airlines in 1945 had 16,500 route miles and flew a total of 2,926,797 miles.

FINANCE. The ordinary budget (1948-49) balanced at 4,769,000,000 kr. (surplus of 539,000,000 kr.), and the capital budget at 343,000,000 kr. The national debt on May 31, 1948, was 11,274,000,000 kr. The Riksbank (National Bank of Sweden), belonging entirely to the state, is the sole bank of issue.

MINERALS. Sweden's high-grade iron ore deposits are among the world's richest. Those in central Sweden produce principally for domestic use, while the ones in Lapland to the north are worked largely for export, with much of the output being shipped through the Norwegian port of Narvik. Production in 1947 was 8,895,000 metric tons. Gold production was 56,584 troy oz. Other important minerals are copper (18,579 tons), arsenic ore (84,671 tons), manganese (10,697 tons), lead, pyrite ore, silver and zinc. Coal production (500,000 tons a year) is comparatively small; imports of nearly 8,000,000 tons a year are therefore necessary. Wood and peat are extensively used as fuel. Sweden's many waterfalls have a potential of 4,500,000 horsepower. The largest hydroelectric works are state-owned.

FORESTS AND FISHERIES. About 60 percent of Sweden is forested, mostly in pine, and there are vast forest products industries in the north. Sweden supplies a large percentage of the world's mechanical and chemical pulp. In 1947, 274,000 metric tons of newsprint and 1,040,000 tons of paper were produced.

The average annual catch of fish is about 140,000 tons, half of it in small Baltic herring. Cod, mackerel and sprat also are taken in the Baltic, and the inland lakes and rivers are well stocked with salmon, trout and perch. The catch in 1945 was valued at 113,435,000 kr.

TOPOGRAPHY. Sweden, with extreme length of about 990 miles and breadth of 250 miles, slopes eastward and southward from its peak elevation in the Kjölen mountains along the Norwegian border. In the north are mountains and many lakes. To the south and east are central lowlands, and south of them are fertile areas of forest, valley and plain. Along Sweden's rocky coast, chopped up extensively by bays and inlets, are many islands, the largest of which are Gotland (1,220 sq. mi.) and Öland (519 sq. mi.). The country is landlocked to the north. Eight percent of Sweden is covered by lakes.

CLIMATE. Sweden's climate is diversified. The warmest month is usually July, with a mean temperature of 62° at Stockholm. February is the coldest month, with a mean average below 32° for all Sweden (25.7° at Stockholm). Average annual rainfall in the north is 16.5 inches; in the south, 22.5 inches.

Switzerland (Republic)

(Schweiz-Suisse-Svizzera)

Area: 15,940 square miles.

Population (est. 1947): 4,580,000; (Swiss, 91.2%; German, 3.6%; Italian, 3.1%; French, .9%; others, 1.2%—figures by place of birth).

Density per square mile: 287.3.

President (1948): Enrico Celio.*

Principal cities (census 1947): Zürich, 376,564 (textiles, banking); Basel, 186,489 (rail center, Rhine port); Geneva (Genève), 145,349 (intellectual center); Bern, 139,555 (capital).

Monetary unit: Swiss franc.

Languages: German, 71.9%; French, 20.4%; Italian, 6.0%; Romansch, 1.1%; others, .6%.

Religions: Protestant, 57%; Roman Catholic, 41%; Jewish, .4%; others, 1.6%.

*The vice-president ordinarily becomes president the next year. Vice-president in 1948 was Ernst Nobs.

HISTORY. Switzerland, twice the size of New Jersey, is a tourist mecca, but its rugged scenery is more than a commercial asset. Europe's aggressors for centuries, right up through World War II, have usually left Switzerland in peace, largely because of its formidable natural barriers.

Swiss history is principally the story of the drawing together of various fiefs of the Holy Roman Empire into a single union for common defense. The process began in 1291, with the cantons of Uri, Schwyz and Nidwalden as the nucleus. Over the next 300 years, ten new cantons entered the federation, which nominally remained part of the Holy Roman Empire until the Treaty of Westphalia gave it independence in 1648.

The French revolutionary army succeeded in occupying Switzerland in 1798 and organized it as the Helvetic Republic, but Napoleon restored the federation in 1803. The Congress of Vienna (1815) declared Switzerland an independent, neutral state in perpetuity, and fixed the nation's borders as they exist today. Out of the brief Swiss civil war of 1847 came the democratic constitution of 1848, which was influenced by the U. S. constitution.

Switzerland maintained strict neutrality in World Wars I and II, during which its diplomatic delegations represented the interests of many of the belligerents. Both sides bombed several Swiss cities by mistake in World War II. Switzerland was a center of both Axis and Allied espionage and counter-espionage during the war.

GOVERNMENT AND DEFENSE. Since the adoption in 1874 of their present constitution, the Swiss have had a federation of 22 sovereign cantons. Each canton has its own legislature, executive and judiciary departments, and the cantons have the right of veto over federal legislation through the referendum.

The Federal Assembly has two houses—a Council of States of 44 members, two from each canton, and a National Council of 194 members elected for four-year terms. The seven members of the cabinet (Federal Council) are elected for four years by the Federal Assembly, which also elects the Swiss president from among its own members for a period of one year. The federal government is supreme in matters of war, peace and treaties, and regulates the army, railroads, postal service, mints and national bank note issues.

In peacetime, the highest Swiss army officer is a colonel. In wartime a commander in chief is named with rank of general. Since the army is a national militia, it maintains no standing forces, but military service is compulsory from the ages of 18 to 60, with an initial training period of about three months and an 11-day refresher course once a year. The force of men trained and physically fit is about 650,000. The air force has about 5,000 personnel and 400 planes, maintained under the general staff.

SOCIAL AND ECONOMIC CONDITIONS. Primary education is compulsory, free and locally controlled. In 1946 primary schools had 431,132 pupils, and secondary and lower middle schools had 88,015. There are seven universities, with total enrollment of 12,760 in 1947.

Religious freedom is guaranteed under the constitution. German, Italian and French were recognized as national languages in 1874, and Romansch, a dialect of the Alpine regions, was also made official in 1937.

With nearly a fourth of its land unproductive, and with half of it in pasture or forest area, Switzerland is dependent on imports for food supply. Wheat, potatoes, fruits, oats, barley, rye, sugar beets and grapes are grown, but stockraising and dairy farming account for three-fourths of the agricultural production. In 1948 there were 1,423,600 cattle, and 766,700 hogs, and in 1947, 182,467 sheep and 189,018 goats. Production of cheese in 1947 was 40,251 short tons, and that of butter 16,240 tons. Approximately 20 percent of the population is engaged in agriculture. Total value of agricultural production in 1947 was 2,033,600,000 fr.

Manufacturing is the principal economic activity, with more than 40 percent of the population being sustained by manufactures or mechanical pursuits. Industry is

conducted largely in small plants using highly skilled workers. Almost all the raw materials are imported, and products consist almost exclusively of high grade, expensive commodities. In 1947 there were 10,985 industrial establishments with 521,351 workers.

Manufactures include chemical products, machines, watches, textiles, aluminum, precision instruments, lumber, shoes and fine handmade embroidery. Chief agricultural industries are the manufacture of fine cheeses and condensed milk. With its many scenic attractions, Switzerland draws the heaviest and most profitable tourist trade in Europe.

Switzerland is dependent on foreign trade for its prosperity. Trade statistics are as follows, in millions of Swiss francs:

	1938	1946	1947
Exports	1,320	2,676	3,268
Imports	1,599	3,423	4,820

In 1947 the leading exports were watches (23%), machines (19%), chemicals (17%), silk textiles (10.0%) and cotton textiles (6.5%). Leading customers were the U. S. (12%), Belgium (9.3%), France (9.1%), Sweden (6.6%) and Italy (6.5%). Leading suppliers were the U. S. (21%), France (9.5%), Belgium (8.8%), Britain (6.7%) and Italy (6.6%).

The Rhine, navigable from Basel to the North Sea, is the principal inland waterway. Railways built over rugged terrain, entailing construction of many bridges and tunnels, totaled 3,218 miles in 1946, mostly electrified. The railroads are of great strategic importance in communications between Germany and Italy. Road mileage totals about 10,200. State aerial service is gradually being developed.

Federal expenditures in 1948 were estimated at 1,786,600,000 fr., and revenue at 1,779,700,000 fr. The total national debt on Dec. 31, 1946, was 14,678,458,000 fr.

Swiss minerals are negligible except for aluminum (1944: 37,400 short tons). Small amounts of iron, gold and coal also are found. Nearly 25 percent of the country is covered by forest.

TOPOGRAPHY AND CLIMATE. Most of Switzerland is an irregular, mountainous plateau bordered by the great bulk of the Alps on the south and by the Jura Mountains on the northwest. Its greatest length is 226 miles, greatest width, 137 miles. A fourth of its total area is covered by scenic mountains and glaciers. The highest peaks are Monte Rosa (15,217 ft.) and Matterhorn (14,780 ft.), both on the Italian border, and the Jungfrau (13,667 ft.), southeast of Interlaken. The sources of the Rhine, Rhône and Aar are in Switzerland. The country's largest lakes, Geneva, Constance (Boden See) and Maggiore, straddle

the French, German-Austrian and Italian borders, respectively. Neuchâtel, 92 square miles, is the largest wholly Swiss lake.

The climate is temperate and varies greatly with altitude. The coldest month (January), for example, averages 31.8° at Basel, which is 909 feet in elevation, and 16.2° at Säntis, with altitude of 8,202 feet. July is the warmest month, with a mean of 66.4° in Basel and 41° at Säntis.

Syria (Republic)

Area: 73,587 square miles.

Population (est. 1943): 2,860,411 (Arab, Armenian, Kurdish, Turkish, French).

Density per square mile: 38.9.

President: Shukri el Quwatli.

Premier: Jamil Mardam Bey.

Principal cities (est. 1942): Damascus (Damas) 261,010 (capital); Aleppo (Alep), 257,337 (northern trading center); Homs, 64,940 (farming, silk); Hama, 60,225 (Bedouin trading center).

Monetary unit: Syrian-Lebanese pound.

Languages: Arabic, Aramaic, French.

Religions: Moslem (Sunni), 69.8%; Moslem (Alawite), 11.0%; Greek Orthodox, 4.6%; Armenian Orthodox, 3.5%; Moslem (Druze), 3.1%; others (Syrian Orthodox and Catholic, Greek and Armenian Catholic, Israelite, etc.), 8%.

HISTORY. Ancient Syria was conquered by Egypt about 1500 B.C., and after that by Hebrews, Phoenicians, Assyrians, Chaldeans, Persians and Greeks. From 64 B.C. until the Arab conquest in A.D. 636, it was part of the Roman Empire except during brief periods. The Arabs made it a trade center for their whole empire, but it suffered severely from the Mongol invasion in 1260 and fell to the Ottoman Turks in 1516. Syria remained a Turkish province until World War I.

A secret Anglo-French pact of 1916 put Syria in the French zone of influence. The League of Nations gave France a mandate over Syria after World War I, but the French were forced to put down several nationalist uprisings. In 1930, France recognized Syria as an independent republic, but still subject to the mandate. After nationalist demonstrations in 1939, the French high commissioner suspended the Syrian constitution. In 1941 British and Free French forces invaded Syria to eliminate Vichy control. During the rest of World War II, Syria was an Allied base. Again in 1945, nationalist demonstrations broke into actual fighting, and British troops were rushed in to restore order. In 1946, however, British and French troops were withdrawn. Syrian forces participated in the Arab invasion of Palestine in May, 1948.

GOVERNMENT AND DEFENSE. Syria has a unicameral legislature popularly elected

for four years by male citizens over 20. The premier and cabinet exercise executive power; the president, elected by the legislature, serves a five-year term. Latakia in the northwest and Jebel Druze in the south are part of Syria but have considerable autonomy. The Syrian army is organized around a cadre of *troupes spéciales* transferred from French to Syrian jurisdiction in Aug., 1945.

SOCIAL AND ECONOMIC CONDITIONS. Primary education is compulsory. In 1947 Syria had 1,122 primary schools with an enrollment of 159,268, and 69 secondary schools with 13,435 pupils. There is a university at Damascus. Syria's mutually distrustful religions and sects are a serious weakness.

Agriculture and animal breeding are the main industries. Only half the land is arable, and only a third is actually cultivated. Most crops require irrigation. In 1946 Syria grew 62,567 short tons of wheat, and 310,612 tons of barley; other leading crops include sorghum, olives, cotton, grapes, lentils and tobacco. Stockraising is important among nomads and semi-nomads.

Exports from Syria (including Lebanon) in 1947 totaled £SL87,100,000. Imports were £SL313,600,000. Textiles, fruit, vegetables, tobacco and wool were leading exports; cloth, oil and foodstuffs were imports.

Syria (and Lebanon) had in 1943 a total of approximately 7,000 miles of highway, and 1,100 miles of railway.

The 1947 Syrian budget balanced at £SL125,820,000, of which 20 percent was for defense, and 15 percent for police and gendarme forces.

TOPOGRAPHY AND CLIMATE. Coastal Syria is a narrow plain. Back of that is a range of coastal mountains, and still farther inland is a steppe area. In the east is the Syrian Desert, and in the southeast next to Trans-Jordan is the Jebel Druze Range. The climate is subtropical, with rainfall averaging 50 inches on the coastal range but diminishing to less than four inches in parts of the desert. Summer temperatures at Aleppo range from about 75° at night to 100° during the day; winter temperatures, from freezing to 50°.

Trans-Jordan (Kingdom)

Area (est.): 35,000 square miles.

Population (est. 1946): 370,794 (mostly Arab)*.

Density per square mile (est): 10.6*.

Ruler: King Abdullah ibn Hussein.

Prime Minister: Tewfiq Pasha Abdul Huda.

Principal city (1946): Amman, 45,000 (capital).

Monetary unit: Palestinian pound.

Language: Arabic.

Religions: Moslem (Sunni), except about 30,000 native Christians and 7,000 Circassians.

*Nomadic tribes of desert not included.

HISTORY. Trans-Jordan, once the Lordship of Oultre-Jordain in the Latin Kingdom of Jerusalem, attracted world-wide attention in 1948 when its king, Abdullah, led Arab forces in the invasion of Palestine from the east. An ancient land, about the size of Indiana, the small kingdom was known in the time of Moses as Edom and Moab. It passed to the Amorites of Damascus and in A.D. 106 became part of the Roman province of Arabia. In 633-36 it was conquered by the Arabs, and a period of decline and depopulation ensued.

Conquered by the British in World War I, Trans-Jordan was separated from the Palestine mandate in 1920, and placed in 1921 under the rule of Abdullah ibn Hussein. In 1923 Britain recognized Trans-Jordan's independence, subject to the mandate. During World War II, Trans-Jordan cooperated completely with Britain. On March 22, 1946, Britain abolished the mandate and recognized the full and complete independence of Trans-Jordan. On June 1, 1946, Abdullah became king.

GOVERNMENT AND DEFENSE. Trans-Jordan is a constitutional monarchy. The king rules with the aid of a cabinet of department heads responsible to him, and an elected Legislative Council of 20.

King Abdullah (born 1882) is the second son of the late King Hussein of the Hejaz and the uncle of King Faisal II of Iraq. He is head of the Hashimite family which ruled part of Saudi Arabia until its expulsion by King Ibn Sa'ud.

Defense of the country is entrusted to the British-trained Arab Legion of about 10,000 men, the most effective force among all Arab armies. An annex to the treaty of March 22, 1946, specified that Britain should provide officers, financial assistance, arms and equipment. Britain also reserved the right to maintain troops in Trans-Jordan.

SOCIAL AND ECONOMIC CONDITIONS. Life in Trans-Jordan is primitive; there are estimated to be 50,000 nomads and 120,000 seminomads. At least 95 percent of the total area is deserted. Illiteracy is widespread; in 1944 the 175 schools had 16,066 pupils.

Most of the country is suitable only for pasturing sheep, goats and camels. Cultivated land is limited to a relatively small area west of the Hejaz Railway. In the drier cultivated areas of the plateau, the inhabitants retain tribal organization and still live in tents. Foreign trade is limited to the exchange of wheat, fresh fruit, wool and live animals for sugar, tea, and other neces-

ities. Exports in 1946 totaled £P2,030,000, and imports £P8,116,235.

Despite the sparse settlement of the country, Trans-Jordan has good roads (1946: 1,198 mi.) to Palestine, Syria and Iraq. It is crossed from north to south by the Hejaz Railway.

Governmental expenditures in 1945 were \$10,401,000, revenue \$11,518,000 (including a British subsidy) and national debt \$1,251,000.

TOPOGRAPHY AND CLIMATE. Trans-Jordan is mainly a plateau with an average altitude of 3,000 feet, sloping gently eastward. The western edge is a steep slope overlooking the Rift Valley (Jordan River, Dead Sea and Wadi el Araba) 3,000–4,000 feet below. In the south are mountains over 5,000 feet high and a sandstone area cut by deep canyons. The country borders on the Red Sea for a few miles in the southwest. The subtropical steppe and desert have wet cold winters and dry hot summers. Rainfall near the escarpment decreases from about 26 inches in the north to 10 inches in the south. Average maximum temperature in August is 92°; average minimum in January is 39°.

Trieste

(Free Territory under U. N. protection)

Area: 258 square miles.

Population (est. 1948): 341,000 (Italian, 85%; Slovene and Croat, 10%; others, 5%).

Density per square mile: 1,321.1.

Principal city (census 1936): Trieste, 237,717.

Monetary unit: Lira.

Religion: Predominantly Roman Catholic.

Languages: Italian and Slovene (official), Croat.

Focal point of Big Power dispute during the 1946 treaty negotiations, the tiny Free Territory of Trieste on the northeastern Adriatic took existence on Sept. 15, 1947. Soviet Russia had backed Yugoslav claims for the whole Istrian peninsula, including the port of Trieste, an ideal sea outlet for Soviet-dominated Danubia. The U. S. and Britain opposed these claims. A French compromise was adopted which gave Yugoslavia the predominantly Italian cities of western Istria, including the Pola naval base; from the other predominantly Italian parts, consisting of the city and surrounding territory of Trieste, the Free Territory was formed under U.N. protection.

The territory formed part of Austria (Trieste from 1382) before World War I, and Trieste became the strategic port of central Europe and outlet for the trade of the Danube basin. By the treaty of Rapallo (Nov. 12, 1920) between Italy and Yugoslavia, the territory along with all of Istria went to Italy as part of "Italia irredenta."

After the German collapse early in May, 1945, Tito's Yugoslav forces occupied the territory, determined to unite it with Yugoslavia. By an agreement of June 9, 1945, most of Venetia Giulia was put under temporary Yugoslav administration, but a smaller part, including Trieste, was placed under Allied control.

The governor of the Free Territory, who cannot be an Italian or Yugoslav national, is appointed by the United Nations Security Council for a term of five years, after consultation with the Italian and Yugoslav governments. Legislative authority is vested in a popularly elected unicameral Assembly. The Council has not yet reached agreement on the choice of a governor; hence the territory is still administered by Anglo-U. S. and Yugoslav forces within the two zones defined by the peace treaty. On March 20, 1948, the U. S., Britain and France jointly proposed the return of Trieste to Italy. Yugoslavia countered with an offer to yield Trieste if Italy in turn would give up the city of Gorizia, but the Italian government refused. On July 3, 1948, Michele Miana was appointed mayor of the city.

Turkey (Republic)

(Türkiye Cumhuriyeti)

Area: 296,185 square miles.

Population (census 1945): 18,861,609 (Turkish, 94%; Greek, 2.2%; Bulgarian, 1.4%; Yugoslavian, .9%; others, 1.5%)*.

Density per square mile: 63.7.

President: İsmet İnönü.

Prime Minister: Hasan Saka.

Principal cities (census 1945): Istanbul (formerly Constantinople), 845,316 (chief port, commercial center); Smyrna (İzmir), 200,088 (seaport); Ankara (Angora), 227,505 (capital); Adana (Seyhan), 100,367 (agricultural center); Brusa, 86,021 (silk, carpets); Eskişehir, 80,096 (trading center).

Monetary unit: Turkish pound.

Languages: Turkish, Greek, Bulgarian.

Religions: Mohammedan, 98.6%; others, 1.4%.

*1935, by place of birth.

HISTORY. Successor to the once great Ottoman Empire, Turkey is a nation of striking contrasts ranging from the multi-racial metropolis of Istanbul to the dreary ranges of Anatolia. It has made marked advances toward modernization and Westernization during the past 25 years under the impetus given by the national hero, the late Kemal Atatürk.

The Ottoman Turks first appeared in the early 13th century A.D. Under the leadership of their aggressive sultans, they gradually spread their hegemony over most of the Near East and the Balkans, capturing Constantinople in 1453 and storming the gates of Vienna in the 17th century. At the height of its power, the Empire

stretched from the Persian Gulf to the frontiers of Poland and from the shores of the Caspian Sea to Oran in Algeria.

The defeat of the Turkish navy at Lepanto in 1571 by the Holy League and of Turkish forces besieging Vienna in 1683 portended the decline of Ottoman power, reducing Turkey to the status of a pawn in Europe's political maneuvers. Russia moved into the Balkans in the 18th century and made herself official protector of the Balkan Christians. Fear of a Russian drive on Constantinople prompted England and France to declare war on Russia, and the Crimean War (1853-56) followed. As a result of the Russo-Turkish war (1877-78), Bulgaria became practically independent, and Rumania and Serbia threw off their nominal allegiance to the sultan. Further defeats were suffered by Turkey in a war with Italy (1911-12) and in the Balkan Wars (1912-13). Meanwhile, a revolt led by the Young Turks, an organization of youthful liberals, had forced the abdication of Sultan Abdul-Hamid in 1909 and established a constitutional regime.

On Aug. 2, 1914, at the outbreak of World War I, a secret alliance was signed between Germany and Turkey, whose army was advised by a German military mission, and in September the Allies declared war on Turkey. Turkish forces successfully defended the strategic Dardanelles, but British forces seized Palestine, Mesopotamia and Syria; and the Hejaz revolted. By 1918 Allied forces held the territory along the Dardanelles and the Bosphorus, and later Greek forces occupied Smyrna and vicinity.

In 1919 the new Nationalist party, headed by Mustafa Kemal, was organized to resist the Allied occupation, and in 1920 a National Assembly elected Mustafa Kemal president of both the assembly and the government. Under his leadership, the Nationalist government was recognized by foreign powers, the Greeks were driven out of Smyrna, and other Allied forces were withdrawn. The present Turkish boundaries (with the exception of Alexandretta, ceded to Turkey by France in 1939) were fixed by the Treaty of Lausanne (1923) and later negotiations. The caliphate and sultanate were separated and the sultanate abolished on Oct. 1, 1922. On Oct. 29, 1923, Turkey formally became a republic with Mustafa Kemal, who took the name of Kemal Atatürk, as its first president. He carried out an extensive program of reform, modernization and industrialization.

The Montreux Convention (1936) abrogated a number of provisions of the Treaty of Lausanne relating to the Straits and authorized Turkey to fortify the former demilitarized zone. Turkey was given sole responsibility for the defense of the area. On Aug. 7, 1946, Soviet Russia proposed in a note to Turkey that defense of

the Straits be made a joint Turkish-Soviet responsibility under a revision of the Montreux convention, but the proposal was opposed by both Britain and the U. S., as well as by Turkey.

General Ismet İnönü was elected to succeed Kemal Atatürk on the latter's death in 1938 and was re-elected in 1939, 1943 and on Aug. 5, 1946. On Oct. 19, 1939, a mutual assistance pact was concluded with Britain and France. Turkey followed a neutral course during most of World War II, but on Aug. 2, 1944, she broke off relations with Germany, and on Jan. 3, 1945, with Japan. On Feb. 23, 1945, she declared war on Germany and Japan, but took no active part in the conflict. After the abrogation of the Soviet-Turkish non-aggression pact in March, 1945, Turkey was subjected to Soviet pressure for a share in the control of the Dardanelles. To assist Turkey in effecting modernization necessary for the preservation of its national integrity, the U. S. in 1947 agreed to advance \$100,000,000, all of which was to be used for the armed forces or to a lesser extent for economic projects directly related to Turkish defense.

GOVERNMENT. The constitution, as amended in 1937, defines the Turkish state as "republican, nationalist, populist, étatist, secular, and revolutionary." The president is chosen from the deputies of the National Assembly; his term of office is identical with the life of each Assembly. The 465 members of the Assembly are elected by universal suffrage for a term of four years. According to the constitution, the Assembly exercises the executive power through the president and Council of Ministers (cabinet) appointed by him. It may at any time control the actions of the government and at any time dismiss it.

The principal political party is the nationalistic Republican People's party, but other parties were allowed to participate in assembly elections held July 21, 1946, in which the Democrat party obtained 60 seats and Independents 4 out of 465. Centralization is the basis of the governmental system. The pre-republic judicial system, based on Sunni Moslem law, was replaced in 1926 by a new system based on the Swiss civil code.

DEFENSE. Military service is compulsory from 20 to 45; the initial training period is three years. The strength of the army, mobilized since 1939, is about 650,000. Large purchases of modern matériel were made during World War II, and additional armaments were received from the U. S. in 1947-48. The air force, under the direct control of the Turkish General Staff, had a strength of about 1,050 planes in 1947. The navy has 1 battle cruiser, 2 outdated cruisers, 8 destroyers and large torpedo boats, and 14 submarines, in addition to a number

former U. S. and British minesweepers. **EDUCATION.** Elementary education is nominally obligatory from 7 to 16. According to the census of 1935 only 2,517,878 of the population were literate in the Latin alphabet, which replaced the Arabic script in 1928. In 1946 there were 14,981 primary schools with 1,357,200 pupils, and in 1944, 25 secondary schools with enrollment of 104,225. There were 26 institutions of higher learning with 18,193 students in 1944.

AGRICULTURE AND INDUSTRY. Agriculture is the principal economic activity, engaging about 65 percent of the population. Only about 20 percent of the land is under cultivation, but the government has made great efforts to modernize and improve farming. The most important cash crop is tobacco (1947: 90,120 metric tons) with the best quality coming from the Pontic coast near Samsun and also from Bafra, Sinop and Trebizond. Cotton (1946: 59,000 metric tons) is grown largely in the south of Asia Minor while figs come exclusively from the Smyrna region. Principal grain crops, with 1946 production in metric tons, are wheat (3,648,000), barley (1,654,600) corn (594,000) and oats (230,300). Turkey is a leading exporter of olive oil; the Brusa region and the Ionian coast are the principal areas of cultivation. Opium poppies are grown in the Smyrna, Malatia and Tokat regions.

Turkey is rich in livestock. The most important animal is the goat, of which there were 16,625,000 in 1946, including the valuable Angora which thrives on the uplands of the plateau. There were also 9,764,000 cattle, 1,038,000 horses, 1,620,000 asses, and 3,528,000 sheep.

In 1941 Turkey had 1,052 industrial establishments. Staple industries have been established in iron, steel, textiles, paper, glass, sugar and cement. A large proportion of the factories are government-operated. Istanbul is the major industrial area.

TRADE. Turkey's foreign trade was as follows, in millions of Turkish pounds:

	1938	1946	1947
Exports	144.8	432.0	625.2
Imports	149.8	223.9	685.0

In 1947 the U. S. was Turkey's principal customer, taking 23 percent of the exports. Great Britain was second (16%), followed by Italy (10.5%) and Palestine (7.3%). The leading supplier was also the U. S. (33%), followed by Italy (14%), Britain (12%) and Czechoslovakia (4.9%). Tobacco (30%), grains (25%) and fruits (17%) were the leading exports; cotton goods, machinery and vehicles the principal imports.

COMMUNICATIONS AND FINANCE. In 1946 Turkey had a merchant fleet of 158 vessels with a gross tonnage of 151,100. Seaboard trade is restricted to Turkish

vessels. The republic has pushed the development of a good railway system in Asiatic Turkey. The total length of railways (1945) was 4,462 miles, all state-owned. Highway mileage totals about 103,600.

Governmental expenditure and revenue estimates for 1948 were £T1,243,600,000 and £T1,115,600,000 respectively. The public debt in 1947 was £T1,667,600,000.

MINERALS AND FORESTS. Turkey's rich mineral resources are still comparatively unexploited. Deposits of copper in the large field at Arghana, near the Iraq-Syrian frontier, have been estimated at 1,600,000 tons (1947 output: 10,080 metric tons). Turkey is also relatively rich in coal, with large deposits in the Ereğli region on the Pontic coast some 150 miles from Istanbul (1947 output: 3,960,000 tons). A virtual world monopoly is enjoyed in meerschaum, found in the Eskisehir district. Other important minerals include chrome, manganese ore, emery and antimony.

Nearly nine percent of the total area of Turkey in Asia is forest land, covering 25,419 square miles. A large proportion of Eastern Thrace is also under forest, covering 1,648 square miles.

TOPOGRAPHY AND CLIMATE. Turkey is divided into two natural areas by the historic waterway formed by the Dardanelles, the Sea of Marmara and the Bosphorus. Turkey in Europe comprises an area about equal to the state of Massachusetts. It is hilly country drained by the Maritsa River and its tributaries. Almost all the population is concentrated in and near the two important towns, Istanbul (Constantinople) and Edirne (Adrianople). Turkey in Asia, or Anatolia, about the size of Texas, is roughly a rectangle in shape with its short sides on the east and west. Its center is a treeless plateau rimmed by mountains. Along the seacoast the elevation drops steeply to a wooded plain some 75 miles wide. On the land frontiers, the belt of forest clothes the foothills of the Taurus Mountains and the Armenian highlands.

Turkey has a great variety of climate. Along the coast from Antioch to the Dardanelles the climate is Mediterranean, with rainy winters and dry summers. Thence to the Bosphorus it is transitional to the type of climate with heavy year-round rainfall. Semitropical fruits and tea may be grown in the region beyond Trebizond on the Black Sea. The western plateau has a harsh steppe climate, with cold winters, hot summers and scanty rainfall, while the eastern plateau exhibits a transition from steppe to alpine climate. Istanbul has a mean annual temperature of 57° (maximum 99°, minimum 17°) and average yearly rainfall of 28.3 inches. Rain falls approximately one day out of three.

Union of Soviet Socialist Republics

Area (est.): 8,473,444 square miles* (8,173,666 in 1938).

Population (est. 1945): 192,900,000* (170,467,186 by 1939 census) (Great Russian, 58.4%; Ukrainian, 16.6%; Byelorussian, 3.1%; Uzbek, 2.9%; Tartars, 2.5%; Armenian, Azerbaijani, Georgian, each 1.3%; more than 100 others, 12.6%).

Density per square mile: 24.9*.

Chairman of Presidium of Supreme Council: Nikolai M. Shvernik.

Premier: Joseph Vissarionovich Stalin.

Principal cities (census 1939): Moscow, 4,137,018 (capital); Leningrad, 3,191,304 (industrial center, shipbuilding); Kiev, 846,293 (industrial center, Ukraine); Kharkov, 833,432 (iron and steel, coal); Baku, 809,347 (oil center, Azerbaijan); Gorki, 644,116 (iron and steel); Odessa (1937), 604,223 (chief Black Sea port); Tashkent, 585,005 (textiles, tobacco); Tiflis (Tbilisi), 519,175 (building materials, leather); Rostov on Don, 510,253 (grain, shipbuilding).

Monetary unit: Rouble.

Languages: See Population.

Religions: Russian Orthodox (predominant), Mohammedan, Roman Catholic, Jewish, Lutheran.

*Including acquisitions since 1939.

HISTORY. With an area almost three times that of the U. S. and a population almost one and one-half times larger, the vast Soviet Union has risen in 30 years from a war-stricken agricultural state torn by internecine strife to a great industrial-agricultural federation holding a place second only to that of the U. S. in world power. A police state with a government-owned economy directed by a small Communist minority, the Union successfully absorbed mighty German attacks in 1941-42 and rebounded to drive back into Germany itself.

In 1948 the Soviet Union pursued its policy of securing and consolidating post-war political gains and drawing its neighboring states into a solid bloc in opposition to the western democracies and, in particular, the European Recovery Program. The first rift in this eastern European front appeared in June, 1948, when the Cominform denounced Marshal Tito of Yugoslavia for deviating from the Moscow party line. Tito defiantly rejected the criticism.

Meanwhile, the U.S.S.R. imposed a rail and road blockade on the British and U. S. zones in Berlin after the latter two allies had introduced a new currency in western Germany. As U. S. and British planes flew food and supplies into the beleaguered city, international tension reached a new post-war height.

The recorded history of Russia begins with the perhaps legendary figure of the Viking Rurik, who according to tradition came to Russia in A.D. 862 and founded the first Russian dynasty in Novgorod. The various tribes were united by the spread of Christianity in the 10th and 11th centuries; Vladimir "the Saint" was converted

in 988. During the 11th century the grand dukes of Kiev held such centralizing power as existed. In 1240 Kiev was destroyed by the Mongols, and the Russian territory was split into numerous smaller dukedoms, out of which three large centers emerged—Galicia, Moscow and Novgorod. The early dukes of Moscow extended their dominion through their office of tribute collector for the Mongols.

In the late 15th century, Ivan III, the reigning duke, acquired the rival kingdoms of Novgorod and Tver and threw off the Mongol yoke. Ivan IV, the Terrible (1533-84), first Muscovite duke to assume the title of tsar, is considered to have founded the Russian State. He crushed the power of rival princes and boyars (great landowners), but Russia remained largely medieval until the reign of Peter the Great (1682-1725), grandson of the first Romanov tsar, Michael (1613-45). Peter effected extensive reforms aimed at Westernization, and through his defeat of Charles XII of Sweden at the Battle of Poltava (1709), he extended Russia's boundaries to the west. Catherine the Great (1762-96) continued Peter's Westernization program and also expanded Russian territory, acquiring the Crimea and part of Poland. During the reign of Alexander I (1801-25), Napoleon's attempt to subdue Russia was defeated (1812-13), and new territory was gained, including Finland (1809) and Bessarabia (1812). Alexander was the originator of the Holy Alliance which crushed for a time Europe's rising liberal movement. Between the Napoleonic Wars and World War I, a few reforms were introduced, but the autocratic power of the tsars remained unchanged.

During the reign of Alexander II (1855-81), Russia's borders were pushed to the Pacific and into central Asia. Serfdom was abolished in 1861, but heavy restrictions were imposed on the emancipated class. Revolutionary strikes following Russia's defeat in the war with Japan forced Nicholas II (1894-1917) to grant a representative national body (Duma), elected by narrowly limited suffrage. It met for the first time in 1906. Nicholas continued in his reactionary course, however, and the overwhelmingly liberal Duma had little or no influence in the government.

World War I demonstrated the corruption and inefficiency of the tsarist regime although the call of patriotism held the poorly equipped army together for a time. Disorders broke out in Petrograd (now Leningrad) in March, 1917, and, following the winning over of the Petrograd garrison, the revolution was in full swing. Nicholas was forced to abdicate under pressure from the Duma and was later killed by the revolutionists. A provisional government was formed, composed of both conservative and radical elements. This

government, under the successive premier-ships of Prince Lvov and Alexander Kerensky, a Menshevik or moderate socialist, soon lost ground to the radical or Bolshevik wing of the Socialist Democratic Labor Party. Finally, on Nov. 7, 1917, came the Second Revolution, engineered by Nikolai Lenin and Leon Trotsky and their small but well-disciplined Bolshevik following in the Petrograd Soviet. The government was turned over the next day to the Congress of Soviets (councils of soldiers, peasants and workers), which vested the government in a Council of People's Commissars with Lenin as premier and Trotsky as foreign minister. The humiliating Treaty of Brest-Litovsk (March 3, 1918) concluded the war with Germany, but civil war and intervention by foreign powers prevented the new Communist government from gaining control of all Russia until 1920. A brief war with Poland in 1920 resulted in Russian defeat and withdrawal.

On July 6, 1923, the vast territory under Soviet rule—previously an inchoate mass whose constituent parts were changing constantly—became the Union of Soviet Socialist Republics, formed by the union of the Russian S.F.S.R. and the Ukrainian, Byelorussian and Transcaucasian S.S.R.'s.

The sudden death of Lenin (Jan. 21, 1924) precipitated an intraparty struggle between the group led by Joseph Stalin, general secretary of the party, and the opposition, led by Trotsky, which favored not only swifter socialization at home but fomentation of revolution abroad. In 1927, Trotsky and other opposition leaders were expelled from the party and exiled. The first Five-Year Plan (1928-32) called for gradual, progressive increase in industrial and agricultural production. Its collectivization program was opposed by the Kulaks, or wealthier peasants, who were vigorously oppressed. Purges carried out in 1936-38 removed many prominent leaders of the revolution and high-ranking army officers.

Soviet foreign policy—first featured by friendship with Germany and antagonism toward England and France and then, after Hitler's rise to power in 1933, by participation in the League of Nations and an anti-fascist program—took another abrupt turn on Aug. 24, 1939, with the signing of a Soviet-German nonaggression pact. Territory seized from Poland (Sept., 1939) became part of the Ukrainian and Byelorussian S.S.R.'s; that secured from Finland at the conclusion of the Finnish war of 1939-40, part of the Karelian S.S.R. set up March 1, 1940; that secured from Rumania (Bessarabia and northern Bukovina), part of the Moldavian S.S.R. set up Aug. 2, 1940; and finally the formerly independent states of Estonia, Latvia and Lithuania, occupied in June, 1940, were absorbed into the U.S.S.R. as the 14th, 15th and 16th Soviet Republics.

Immediately following the German attack (June 22, 1941), all necessary powers for the defense of the state were vested in the State Defense Council headed by Stalin, who had taken over the post of premier on May 6. The Germans quickly seized approximately 500,000 square miles of Soviet territory, but Soviet forces resisted stubbornly, aided by increasing amounts of matériel from the U. S. and Britain. The great Soviet counteroffensive

Rulers of Russia Since 1462

	Born	Reigned
Ivan III the Great ¹	1440	1462-1505
Basil III ²	1479	1505-1533
Ivan IV the Terrible ³	1530	1533-1584
Theodore I	1557	1584-1598
Boris Godunov	c.1551	1598-1605
Theodore II	1589	1605-1605
Demetrius I ³	?	1605-1606
Basil IV Shuiski	?	1606-1610
"Time of Troubles" ⁴		1610-1613
Michael Romanov ⁵	1596	1613-1645
Alexis I	1629	1645-1676
Theodore III	1656	1676-1682
Ivan V ⁶	1666	1682-1689
Peter I the Great ⁶	1672	1682-1725
Catherine I	c.1684	1725-1727
Peter II	1715	1727-1730
Anna	1693	1730-1740
Ivan VI	1740	1740-1741
Elizabeth	1709	1741-1762
Peter III	1728	1762-1762
Catherine II the Great	1729	1762-1796
Paul I	1754	1796-1801
Alexander I	1777	1801-1825
Nicholas I	1796	1825-1855
Alexander II	1818	1855-1881
Alexander III	1845	1881-1894
Nicholas II	1868	1894-1917

PROVISIONAL GOVERNMENT

Prince Georgi Lvov (premier)	1861	1917-1917
Alexander Kerensky (premier)	1881	1917-1917

U. S. S. R.

Nikolai Lenin (premier)	1870	1917-1924
Joseph Stalin (premier) ⁷	1879	1924-

¹Grand Duke of Muscovy.

²First tsar of Russia; had himself crowned as such in 1547.

³Also known as Pseudo-Demetrius. His origin is obscure. He claimed to be Ivan IV's youngest son, Demetrius, who had been murdered in 1591. Demetrius I conquered Moscow in 1605 but was killed in 1606. From 1607-12, two other men, posing as Demetrius, attempted to capture Moscow but failed.

⁴During this period, the throne remained empty.

⁵First of the Romanov line, which lasted until the Russian Revolution. Michael was the grand-nephew of Ivan IV.

⁶Ruled jointly until 1689, at which time Ivan V was deposed.

⁷As General Secretary of the Communist Party, Stalin was actual head of the Soviet Union from 1924-41. In 1941, he became premier.

in the Stalingrad area (Nov., 1942-Feb., 1943) marked the turning point. Soviet troops gradually pushed the Nazis back and unleashed their final great offensive on Jan. 12, 1945. The nonaggression pact with Japan (1941) was denounced in April, 1945, and, following the declaration of war on Japan (Aug. 8, 1945), Soviet Far Eastern forces quickly occupied Manchuria, Karafuto and the Kuriles.

After the end of the war, the fourth Five-Year Plan was launched in Sept., 1945, with emphasis on the expansion of heavy industry.

GOVERNMENT. Under the constitution of 1936, the Soviet Union is "a Socialist State of Workers and Peasants" whose highest organ is the Supreme Council of the Union, which exercises legislative authority. It consists of two co-equal Houses—the Council of Nationalities, in which each constituent republic has 25 representatives, each autonomous republic 11, each autonomous oblast five, and each national okrug one (total 713); and the Council of the Union, elected on a nationwide basis with one representative for each 300,000 of population (total membership 647). All representatives are elected for four-year terms; the last election was held on Feb. 10, 1946. Elections amount to a blanket endorsement (or rejection) of a single list of candidates already nominated by the Communist Party, youth organizations, collective farms and trade unions. The only election in the Western sense of the word takes place in the selection of the nominees by these groups. All citizens over the age of 18 are enfranchised.

The Presidium of the Supreme Council acts as a directive body between the sessions of the Supreme Council. It has a chairman (sometimes referred to as the Soviet president), 16 vice chairmen (one for each constituent republic), a secretary and 24 members, all elected by the Supreme Council.

The highest executive and administrative power is exercised by the Council of Ministers (formerly People's Commissars) appointed by the Supreme Council and headed by a chairman (premier) and eight vice chairmen. It issues decrees and executive orders on the basis of laws in operation and supervises their execution. The administrative machinery is necessarily vast and complicated, since it is responsible not only for the ordinary administrative functions of government, but also for the operation of state-owned enterprises.

The 16 constituent republics of the Union are as follows: the Russian Soviet Federated Socialist Republic (capital: Moscow) covering about 80 percent of the total area; the Ukrainian S.S.R. (Kiev); Byelorussian S.S.R. (Minsk); Armenian S.S.R. (Erivan); Azerbaijan S.S.R. (Baku);

Georgian S.S.R. (Tiflis); Turkmen S.S.R. (Ashkhabad); Uzbek S.S.R. (Tashkent); Tadzhik S.S.R. (Stalinabad); Kazakh S.S.R. (Alma Ata); Kirghiz S.S.R. (Frunze); Karelo-Finnish S.S.R. (Petrozavodsk); Moldavian S.S.R. (Kishinev); Lithuanian S.S.R. (Vilnius); Estonian S.S.R. (Tallinn) and Latvian S.S.R. (Riga).

Postwar territorial acquisitions include the Carpatho-Ukraine (12,617 sq. mi.) obtained from Czechoslovakia June 29, 1945, incorporated into the Ukrainian S.S.R. as Zakarpatskaya Oblast; the Republic of Tannu Tuva in central Asia (64,000 sq. mi.) incorporated early in 1945 into the R.S.F.S.R. as the Tuvinian Autonomous Oblast; Karafuto or southern Sakhalin (13,935 sq. mi.) and the Kurile Islands (3,944 sq. mi.), occupied by Soviet troops in Aug., 1945, and incorporated into the Khabarovsk Kral of the R.S.F.S.R.; the northern part of eastern Prussia (about 7,000 sq. mi.), placed under *de facto* Soviet administration at the Potsdam Conference and incorporated into R.S.F.S.R. as Kaliningrad (formerly Königsberg) Okrug; the Petsamo district of Finland, obtained *de jure* under the 1947 treaty and incorporated into the Murmansk Oblast of the R.S.F.S.R.; and Poland east of the Curzon Line (77,703 sq. mi.), under terms of the Soviet-Polish treaty of Aug. 16, 1945, incorporated into the Ukrainian and Byelorussian S.S.R.'s.

COMMUNIST PARTY. The only political party permitted to exist in the Soviet Union is the All-Union Communist Party, which now has more than 6,000,000 members. Its organization parallels the entire governmental and economic structure of the country and guides all important action through instructions from the central organs to Party members who occupy most of the important political and economic positions. Its highest organ is the All-Union Party Congress, which meets irregularly. The Congress elects a Central Committee (71 members, 68 alternates), which in turn elects (1) an executive body (Politburo) with ten members and four alternates, (2) an organizational bureau (Orgburo), which manages the Party, (3) a secretariat headed by a general secretary (Stalin), and (4) a Committee of Party Control with 31 members.

The members of the all-powerful Politburo are Stalin, V.M. Molotov, A.A. Andreyev, K.E. Voroshilov, L.M. Kaganovich, A.I. Mikoyan, N.S. Khrushchev, L.P. Beria, G.M. Malenkov; (A.A. Zhdanov died 1948); (alternates), N.A. Voznesensky, N.A. Bulganin, A.N. Kosygin and N.M. Shvernik.

In Sept., 1947, the Cominform (Communist Information Bureau), a Soviet-dominated organization composed of representatives from nine national Communist parties, was established in Belgrade

It was designed to replace the Comintern (dissolved in 1943) as an instrument in the promotion of worldwide communism. The new unit was described as representing the core of a united front against the threat of "reactionary and imperialist aggression," typified most immediately in the Soviet-boycotted European Recovery Program.

DEFENSE. The land, air and sea forces of the Union are under the unified control of the Armed Forces Ministry headed by Marshal Nikolai Bulganin. The army, the navy, the air force and the supply services have separate staffs and commanders operating under his general supervision. Military service is compulsory; the initial training period varies from 2 to 5 years. The armed forces, which were estimated to have reached a peak of more than 15,000,000 in mid-1945, numbered about 4,000,000 in 1948. The strength of the army, including MVD and NKVD troops (secret police organizations with paramilitary formations) was estimated at slightly more than 3,000,000, organized in about 190 divisions, only a third of which were at full strength (10,000). The air force had from 400,000 to 600,000 men and about 25,000 planes, and the navy from 500,000 to 600,000. More than 500,000 troops were stationed outside Soviet borders, and at least 700,000 were estimated to be located in Siberia and the Soviet Far East.

Information about the Red fleet is as vague as that about the army and air force. In 1948 it was believed to have a tonnage of about 450,000, including four battleships (among which is ex-H.M.S. *Royal Sovereign*), 10 cruisers (including ex-U.S.S. *Wilwaukee* and ex-German *Nürnberg*), more than 150 submarines, more than 60 destroyers, and large flotillas of coastal and river craft, patrol vessels, minesweepers and other ancillary craft. At least one 16-inch-gun battleship (*Treti International*) and one 22,000-ton aircraft carrier (*Krasnaya Znamya*) are under construction, and an extensive construction program under the fourth Five-Year Plan is in progress. In addition, the U.S.S.R. was scheduled to receive 45 ships from the Italian fleet in 1948, including an old battleship, a cruiser and three destroyers.

On its face, about 17 percent of the 1948-49 budget was allotted for military expenditures, but expenses linked to the armed forces in other parts of the budget, including police allotments and industrial commitments under the Five-Year Plan, greatly increased this percentage.

EDUCATION. The school system throughout the country is based upon uniform textbooks and the same syllabus, although a number of hours are allowed for native language, literature and history in the non-Russian schools. All schools are state

controlled, and compulsory education begins at the age of seven. Coeducation is being abolished and separate schools established for boys and girls. The boys' curriculum stresses military training; the girls', housework. Enrollment in primary and secondary schools in 1946 was 29,339,000. Under the Defense Ministry are the newly established Suvorov military schools for the training of future officers. In the academic year 1945-46, 772 colleges and institutions of higher learning were functioning, with a student body of 653,000. Literacy was estimated at 81% in 1940.

AGRICULTURE. Formerly an agricultural country, the Soviet Union has grown in the last 25 years into an industrial-agricultural power, with agriculture making great advances at the same time. The total area under cultivation was 259,500,000 acres in 1913, 291,600,000 acres in 1929, and 388,000,000 acres in 1941.

PRODUCTION OF PRINCIPAL CROPS (in millions of tons)

Crop	1913	1929	Latest
Wheat	26.2	18.8	45.1 (1939)
Raw cotton	.7	.8	.5 (1946)*
Flax	.2†	.4†	.7 (1939)
Sugar beets	10.9	6.2	19.1 (1946)
Potatoes	23.3	45.6	64.0 (1940)

*Ginned. †Average for five preceding years.

ANIMAL INDUSTRY (millions of head)

Animal	1918	1933	1947
Horses	35.8	16.6	11.9
Cattle	60.6	38.4	52.0
Sheep and goats	121.2	50.2	102.5*
Pigs	20.9	12.1	13.4

*1938; sheep only, in 1946, were estimated at 72,000,000.

The Union's diverse climate permits the growing of the most varied crops, ranging from the temperate to the subtropical. Under the current Five-Year Plan, it is contemplated that by 1950 the grain harvest will be 127,500,000 tons (a 7% increase over the prewar average), sugar beets 26,000,000 (22% increase), raw cotton 3,100,000 (25% increase) and flax 800,000 tons (39% increase). The State Planning Commission reported in Jan., 1948, that agricultural production in 1947 exceeded that of the previous year by 48 percent; no figures, however, were given.

INDUSTRY. Almost all industry in the Soviet Union is carried on by organizations owned or controlled by the state. About 80 percent of the total state industries is controlled by 291 large trusts. The industrialization of the country has been one of the major objectives of its leaders during the past 25 years. The completion of the first two Five-Year Plans (1928-32, 1933-37) and of most of the third (1937-

42) saw a great increase in the volume and versatility of Soviet industry. The following table reveals the growth of some of the principal industries, expressed in the value of annual production based on prices prevailing in 1926-27:

**VALUE OF ANNUAL PRODUCTION
OF SOME PRINCIPAL INDUSTRIES**

(in millions of roubles)

Industry	1913	1933	1938
Electric light and power	45	855	2,262
Coal	301	839	1,518
Ferrous metallurgy	755	1,616	4,023
Metal working industries	1,446	11,283	33,613
Chemical	457	2,301	6,809
Textile	3,519	6,049	11,255

On Jan. 1, 1936, there were 574,064 industrial enterprises, and the value of the output of industry in 1938 was \$9,160,992,300. Production figures (1939) included 549,300,000 pairs of shoes, 49,482,798 tons of metal, and 4,230,973,843 yards of textiles. Unofficial estimates of 1946 placed steel production at 14,870,000 short tons and pig iron production at 16,530,000 short tons.

The large-scale evacuation of plants to the East and the construction of new plants there during World War II, coupled with the eastward orientation of industry prior to the war, has shifted the balance to newly developed regions in Central Asia and Siberia from the Moscow-Leningrad area and the Ukraine. The new regions are now the center of Soviet industrial power, accounting for almost all magnesium and aluminum production, and more than 60 percent of the pig iron and steel production. The production of consumers' goods continues to be subordinate to the production of heavy capital equipment.

Under the current Five-Year Plan the gross output of Soviet industry in 1950 is fixed at 205,000,000,000 roubles (48% above the prewar level). An increase is planned in the output of pig iron to 19,500,000 tons and of steel to 25,400,000 tons (35% above prewar), involving the construction of 45 additional blast furnaces, 180 open-hearth furnaces, 90 electric furnaces and 104 rolling mills. The plan calls for a 100 percent increase in engineering production and equipment and for an increase of 3.7 times in the metallurgical industries. Even if the 1950 steel target is reached, however, Soviet production would be only on a level equaling that of the U. S. in 1913. The value of capital investments in the period 1946-50 is fixed at 157,500,000,000 roubles.

In Jan., 1948, the State Planning Commission announced that total production in the final quarter of 1947 had reached the 1940 level and that output for the whole year was 22 percent over that of 1946.

No statistics of production were released.

FOREIGN TRADE. Soviet foreign trade is a state monopoly, and foreign goods are purchased in accordance with an over-all plan conducted under the supervision of the Foreign Trade Ministry. Connected with the Ministry are a number of export-import and transport combines.

The U.S.S.R. share in world export (1938) was 1.1 percent; imports, 1.2 percent. No later statistics are available. Exports (1938) totaled \$115,000,000, of which 28.2 percent went to the United Kingdom, 8.8 percent to Belgium, 7.3 percent to the U. S., 7.0 percent to the Netherlands and 6.6 percent to Germany. Imports totaled \$122,780,000, of which 28.5 percent came from the U. S., 16.9 percent from the United Kingdom, 7.2 percent from the Netherlands, 4.8 percent from China and 4.7 percent from Germany. Principal exports were grain, 21.9 percent; lumber and timber, 16.8 percent; furs, 9.9 percent; petroleum and products, 7.9 percent; and cotton goods and threads, 4.5 percent. Imports included machines and industrial equipment, 26.8 percent; iron and steel, 10.3 percent; wool, 5.3 percent; electrical machines and parts, 4.2 percent; and live animals, 3.7 percent. From June 22, 1941, until 1945, large supplies were received from Britain and Canada, and from Oct. 1, 1941, until after V-J Day, a total of \$11,141,470,000 in lend-lease assistance came from the U. S.

COMMUNICATIONS. On June 30, 1947, the Soviet merchant marine ranked sixth in the world, with 952 ships aggregating 2,156,987 gross tons. Merchant ship construction has been subordinated to naval construction under the fourth Five-Year Plan. The principal ports include Leningrad on the Gulf of Finland, Murmansk and Archangel on the Arctic Ocean and White Sea, respectively; Vladivostok on the Sea of Japan; and the Black Sea ports of Odessa, Sevastopol, Novorossisk and Batumi. River and canal transport is extremely important. In 1947 there were about 60,000 miles of navigable rivers and canals.

Railway mileage (1945) totaled 66,000 of which about 30 percent was double-tracked. Freight traffic reached 569,117,490 tons and 1,777,800,000 passengers were carried in 1938. Highway mileage (1945) totaled 849,520, less than 10 percent of which was improved. Under the current Five-Year Plan, war-devastated railway lines are being rebuilt and another 4,510 miles are to be constructed, including 3,310 miles in Siberia. In 1946, 1,991 miles were under construction, and 1,552 miles were planned for 1947.

Air traffic is assuming great importance especially in the central Asiatic portion of the U.S.S.R. Prior to World War II, the network of air routes covered 69,845 miles

In 1945, operations of the Civil Air Fleet tripled those for 1940. Moscow is connected with the capitals of all the Union republics by daily air service, and there are regular services to the Far East and Europe. No foreign air routes have been allowed to enter the U.S.S.R.

FINANCE. National expenditures for 1948 were estimated at 387,900,000,000 roubles, and revenue at 428,000,000,000 roubles. The Soviet budget includes charges for the financing of industry, transportation, agriculture and commerce—items which ordinarily are handled through private channels in other countries. The internal debt in 1939 amounted to \$2,667,369,471.

MINERALS. The U.S.S.R. is probably the richest country in the world in mineral resources, containing deposits of almost every known mineral. It ranks fourth in coal production, first in chromite, second in iron ore, third in petroleum, second in gold, and retains high rank in the production of numerous others. The richest mineral region is that of the Ural Mountains, which lacks only good coking coal. Total coal production in 1946 was estimated at 176,500,000 short tons. Other production estimates included aluminum (1945) 95,100 short tons, copper (1945) 177,000 short tons, lead (1944) 121,000 short tons, platinum (1939) 100,000 oz., antimony (1946) 2,300,000 short tons, tin (1938) 14,330 short tons, zinc (1938) 77,161 short tons. Petroleum production in 1946 was estimated at 172,827,000 barrels, including eastern Poland and Sakhalin. Under the current Five-Year Plan annual coal production is to be raised to 275,500,000 short tons by 1950, oil production to 234,000,000 barrels. Production increases in other minerals are also planned.

FORESTS. With a forested area of about 2,346,000,000 acres, the U.S.S.R. possesses a large proportion of the world's timber reserves. Most of the forested area is in Siberia, but there are also valuable stands in the Caucasus.

FISHERIES AND FURS. The rivers, lakes and surrounding seas (except the Black Sea) are rich in fish; the catch averages more than 1,000,000 tons annually. The acquisition of former Japanese fisheries in Karafuto and the Kuriles will double the output of the Far Eastern fish industry. Trapping is an important secondary industry, especially in eastern Siberia.

TOPOGRAPHY. The U.S.S.R. is the largest unbroken political unit in the world, occupying more than one-seventh of the land surface of the globe. The greater part of its territory is a vast plain stretching from eastern Europe to the Pacific Ocean. This plain, relieved only occasionally by low mountain ranges (notably the Urals), consists of three zones running east and west: (1) the frozen marshy tundra of the Arc-

tic; (2) the more temperate forest belt; and (3) the steppes or prairies to the south, which in southern Soviet Asia became sandy deserts. The topography is more varied in the South, particularly in the Caucasus between the Caspian and Black Seas, and in the Tien-Pamir mountain system bordering Afghanistan, Sinkiang and Mongolia. Mountains (Stanovoi and Kolyma) and great rivers (Amur, Yenisei, Lena) also break up the sweep of the plain in Siberia.

CLIMATE. The climate necessarily is varied, but for the most part is continental. In general the climate of the northern and central regions is characterized by long, cold winters and by summers which are shorter and cooler than those in the northern part of the United States. Siberia has the coldest winters in the world; the January average at Verkhoyansk is -59° . In the southern regions the climate varies between temperate and subtropical. The Uzbek, Turkmen and Kazakh S.S.R.'s are largely desert and semi-desert areas. In the central belt rainfall is fairly uniform, averaging about 15 inches east of the Urals and 20 inches to the west. In the tundra to the north it drops to about 8 inches and to 4 inches in the southern regions.

Average daily low temperature at Moscow is about 5° (high, 14°) in January, the coldest month; average daily high is 71° during July, the warmest month.

Uruguay (Republic)

(República Oriental del Uruguay)

Area: 72,172 square miles.

Population (est. 1946): 2,281,000 (white, 86%; mestizo, 12%; Indian, 2%).

Density per square mile: 31.6.

President: Luis Batlle Berres.

Principal cities (est. 1945): Montevideo, 747,665 (capital); Paysandú, 50,000 (meat packing); Salto, 48,000 (cattle raising); Minas (1942), 32,000 (farming center).

Monetary unit: Peso.

Language: Spanish.

Religion: Roman Catholic.

HISTORY. Uruguay, a little larger than North Dakota, has many distinctions. It is the smallest and most densely populated of the sovereign South American nations. It has one of the highest proportions of white population and one of the lowest illiteracy rates in all Latin America. Despite constant pressure from Argentina, and some concessions to that powerful neighbor, Uruguay has managed to remain one of the most democratic and progressive of Latin American states.

Juan Díaz de Solís, a Spaniard, discovered Uruguay in 1516, but the Portuguese

were first to settle it when they founded Colonia in 1680. After a long struggle, Spain wrested the country from Portugal in 1778. Uruguay revolted against Spain in 1811, only to be conquered in 1816-20 by the Portuguese from Brazil. Independence was re-asserted with Argentine help in 1825, and the republic was set up in 1830. There followed a long period of factional strife between two groups still in existence at the present time—the Blancos and the Colorados. President José Batlle y Ordóñez launched a series of social reforms in 1911-15 which started Uruguay on its modern career of democracy, although Gabriel Terra, elected president in 1931, seized dictatorial power and modified the constitution to permit his re-election.

Terra was succeeded in 1938 by Alfredo Baldomir and, in 1943, by Juan José de Amézaga, both of whom worked closely with the U. S. on global and hemispheric policy. In 1946, Tomás Berreta was elected president; he took office March 1, 1947 for a four-year term and was replaced after his death on Aug. 2, 1947, by Luis Batlle Berres.

GOVERNMENT AND DEFENSE. Under the 1936 constitution, Uruguay elects every four years a president, a vice president, a cabinet and a two-house congress—a 99-member Chamber of Deputies and a 30-member Senate. The cabinet and congress are chosen by proportional representation. All literate citizens may vote, including women, who may also sit in congress.

Service in the army (1940 strength: 8,093) is voluntary, but national guard service is compulsory in wartime. There is a police force of about 5,500, and an air force that had 463 men and 45 planes in 1939. The navy had a 1,150-ton sloop, a surveying vessel and several smaller craft on Jan. 1, 1948.

SOCIAL AND ECONOMIC CONDITIONS. Uruguay's illiteracy rate is 35 percent; primary education is compulsory, and all education is free. There were in 1943 a total of 191,191 pupils enrolled in 1,592 public schools, and 20,000 in the university at Montevideo. Uruguay's high percentage of white population includes many foreign-born, mostly Italian and Spanish, but some Brazilian, Argentine and French.

Cattle, sheep, meat and wool dominate the Uruguayan economy. With nearly 80 percent of its grassy land devoted to grazing, there were in 1946 about 25,000,000 sheep. The 1946-47 wool clip was 87,112 short tons. With only about 5 percent of land cultivated, a third of this grows wheat, the chief crop (1946-47: 207,813 short tons). Other crops are corn, flax for linseed, oats, potatoes, beans, fruits, tobacco, alfalfa and grapes. Uruguay makes 70,000,000 liters of wine a year.

Uruguay slaughters more than two mil-

lion head of cattle and sheep a year, and meat processing is the largest manufacturing industry. There are many modern plants for chilling or freezing meat, and plants for preparation of liquid extract of beef.

During World War II Uruguay doubled its foreign trade, and most of the increase went to the U. S. Exports in 1947 were \$162,500,000 and imports \$215,300,000 (excluding gold).

In value, wool is the leading export, amounting to more than two-fifths of the total, followed by canned meat, frozen beef and hides. Chief imports are oil, gasoline, sugar, iron and steel. The U. S. accounted for 36 percent of Uruguay's total foreign commerce in 1947. Uruguay trades extensively with Britain, Brazil and Argentina.

Steamers of 14-foot draft can travel halfway up the Uruguay River border, and smaller craft can go nearly the length of that border. The Río Negro is navigable only in its lower course. Railway mileage in 1945 totaled 1,800. Prior to 1948, 90 percent was British-owned, but in that year the government purchased complete interest. Highway mileage was 8,514 in 1945.

The 1944 budget put revenue at 136,894,503 pesos, and expenses at 136,900,000 pesos; deficit financing continued for the sixth straight year. No formal budgets were approved in 1945 and 1946. The public debt on June 30, 1947, was 692,100,000 pesos. U. S. investments in 1942 were \$10,918,000; British investments on Dec. 31, 1947, £43,567,620.

Minerals are of slight importance. In the north, some gold is mined and there are small deposits of silver, lead, copper, talc and lignite.

TOPOGRAPHY AND CLIMATE. Uruguay, a low rolling plain in the south and a low plateau in the north, has a 120-mile Atlantic shore line, a 235-mile frontage on the Río de la Plata, and 270 miles on the Uruguay River, its western boundary. The climate is good. Average summer temperature in January and February is 71°, and average winter temperature in July is 50°. Frost is almost unknown. Average rainfall is 35 inches, heaviest in the autumn.

Vatican City State

(Stato Città Vaticana)

Area: 108.7 acres.

Population (est. 1941): 970 (Italian, 85%; Swiss and others, 15%).

Ruler: The Supreme Pontiff, Pius XII.

Monetary unit: Lira.

Languages: Latin, Italian.

Religion: Roman Catholic.

The Vatican City State, sovereign and independent, is situated on the Vatican hill on the right bank of the Tiber in northwest Rome. The area has been intimately associated with the history of the Roman Catholic Church since the time of the martyrdom of St. Peter. From it the Pope exercised temporal sway for many centuries over a large part of central Italy; in 1859 the Papal States comprised an area of some 17,000 square miles. During the struggle for Italian unification (1860-70), most of this area became part of the Kingdom of Italy.

By an Italian law of May 13, 1871, the temporal power of the Pope was abrogated, and the territory of the Papacy was confined to the Vatican and Lateran palaces and the Villa of Castel Gandolfo. The Popes consistently refused to recognize this arrangement, and by the Lateran Treaty of Feb. 11, 1929, between the Vatican and the Kingdom of Italy, the exclusive dominion and sovereign jurisdiction of the Holy See over the city of the Vatican was again recognized, thus restoring the Pope's temporal authority over the area. Accompanying the treaty were conventions regulating the position of the Catholic Church in Italy and providing for reimbursement to the Vatican in final settlement of the claims of the Holy See against Italy for the loss of temporal power in 1870-71.

The Supreme Pontiff is Pius XII (Eugenio Pacelli), born at Rome, March 2, 1876, proclaimed cardinal in 1929, and elected Pope on March 2, 1939.

The Pope has full legal, executive and judicial powers. Executive power over the area is in the hands of a governor appointed by the Pope and exclusively responsible to him.

The College of Cardinals is the Pope's chief advisory body, and upon his death the cardinals elect his successor for life. The cardinals themselves are created for life by the Pope. When complete, the College consists of 70 members: 6 Cardinal-Bishops, 50 Cardinal-Priests, and 14 Cardinal-Deacons.

The central administration of the Roman Catholic Church throughout the world is carried on in the Vatican by 12 congregations, 3 tribunals and 5 offices.

In its diplomatic relations with foreign countries, the Vatican is represented by the Papal Secretary of State. In 1948 the Vatican maintained diplomatic relations with 46 states through its papal-nuncios (ambassadors) and inter-nuncios (ministers). Apostolic Delegates, representatives without accredited rank, are maintained in a number of other countries.

The Vatican has its own railway station, postal facilities, coinage, newspaper, radio and television system. In addition to the

Vatican itself, which includes St. Peter's Square, extraterritorial rights are enjoyed by 13 buildings in the city of Rome outside the Vatican City.

Venezuela (Republic)

(Estados Unidos de Venezuela)

Area: 352,143 square miles.

Population (est. 1947): 4,397,918 (mestizo, 65%; white, 20%; Negro, 8%; Indian, 7%).

Density per square mile: 12.5.

President: Rómulo Gallegos.

Principal cities (est. 1947): Caracas, 342,921 (capital); Maracaibo, 131,989 (oil); Barquisimeto, 74,139 (coffee, sugar, mining); Valencia, 59,251 (farming center).

Monetary unit: Bolívar.

Language: Spanish.

Religion: Roman Catholic.

HISTORY. Venezuela, a third larger than Texas, has a stormy political past and the distinction of being the world's second greatest producer of oil, outranked only by the U. S. In South America it is the sixth country in size, the only independent country lying entirely north of the equator, the second most illiterate country, and the birthplace of Simón Bolívar, who led the liberation of much of the continent from Spain.

Columbus discovered Venezuela on his third voyage in 1498. A subsequent Spanish explorer, for reasons of his own, gave the country its name, meaning "Little Venice." There were no important settlements until Caracas was founded in 1567. With Bolívar taking part, Venezuela was one of the first South American colonies to revolt against Spain in 1810, but it was not until 1821 that independence was won. Federated at first with Colombia and Ecuador, the country set up a republic in 1830, and then sank for many decades into a condition of revolt, dictatorship and corruption climaxed by the ironhand regime of Antonio Guzmán Blanco from 1870 to 1889. The U. S. intervened in 1895 to force an arbitration between Great Britain and Venezuela in a dispute over the boundary with British Guiana. From 1908 to 1935, when he died, General Juan Vicente Gómez ruled tyrannically over the nation, picking various satellites to alternate with him in the presidential palace. He was succeeded in 1936 by General Eleazar López Contreras. The president during World War II, General Isaías Medina Angarita, cooperated with the U. S. but permitted such political freedom that he was overthrown on Oct. 19, 1945.

Out of that revolt, militarist in nature, the Socialist leader Dr. Rómulo Betancourt emerged as provisional president, and his

government received U. S. recognition on Oct. 30, 1945. Betancourt's party, the liberal Acción Democrática, won 137 out of 160 seats in an election held Oct. 27, 1946, for a Constituent Assembly to draft a new constitution. The well-known writer, Rómulo Gallegos, easily won the presidential election of Dec. 14, 1947, as the candidate of Acción Democrática. The latter party also won 83 of the 110 seats in the chamber of deputies.

GOVERNMENT AND DEFENSE. Venezuela is a federal union of 20 states, a federal district and two territories. Congress is composed of a 46-member senate and a 110-member chamber of deputies, both elected directly. Under the constitution promulgated July 5, 1947, the president is elected by popular vote for five years and may not succeed himself. The constitution (Venezuela's 20th) established comprehensive political and social rights, including woman suffrage.

Military service is compulsory, with a one- to three-year initial training period. The army has about 10,000 men. The navy has several gunboats and corvettes, and other minor craft.

SOCIAL AND ECONOMIC CONDITIONS. Illiteracy in 1943 was estimated at 70 percent, second in South America only to that of Bolivia. Primary education between 7 and 14 is compulsory. School enrollment in 1946 exceeded 300,000 in 5,543 primary and 122 secondary schools. There are two universities—Los Andes at Mérida, with 700 students, and Central University at Caracas, with 2,800 students.

Agriculture engages the majority of the population, but production has failed to keep pace with the food needs of the rapidly increasing population. The principal crop is coffee, grown on 60,000 plantations on the slopes of the coastal mountains. Annual production averages 1,000,000 bags of 60 kilograms each. Exports of cacao in 1945 were 13,750 tons. Other important crops are sugar, tobacco, cotton, corn, wheat and tropical fruits. Stockraising, centered east of Lake Maracaibo, and on the llanos, is important. Estimates in 1945 showed 4,000,000 cattle, 750,000 calves, 60,000 sheep and lambs, and 1,400,000 goats and kids. Cattle hide production in 1945 was 16,000 metric tons.

There are few industries, the most important being woodworking, cotton textiles and tobacco products. Electric power is plentiful, and a law of 1943 prepared the way for the beginning of an oil refining industry. In 1947, 2,143,730,121 cigarettes were produced.

Oil, most of which is found on the north-west shore of Lake Maracaibo, is by far the dominant factor in the economy. It accounts for 95 percent of exports, gives

the country a big foreign trade balance and a treasury surplus. Exports in 1946 were valued at 1,623,000,000 bolívares and imports at 987,000,000 bolívares. After oil, exports are gold, hides, livestock, coffee and cacao. Chief imports are metals, metal products, machinery, food products, textiles and chemicals. Most of the crude oil goes to the U. S., via Curaçao and Aruba, refining centers in the West Indies. About 35 percent of other exports are U. S. purchased. The U. S. supplies 85 percent of imports, with Britain second.

Highways include 3,829 miles for all-weather use, and 1,600 miles of unimproved road. Railway mileage is about 685, largely in unconnected short lines, ten national and two British-owned. In 1945 Venezuela had 38 airports serving Pan American, K.L.M. (Dutch), and two government-owned lines. La Guaira and Puerto Cabello are the chief seaports. Navigable rivers total 6,500 miles. Most of the tonnage sent along the Orinoco—navigable for 700 miles for river steamers of 12-foot draft—is transshipped at Port of Spain, Trinidad.

The preliminary 1948-49 budget estimated expenditures at 1,601,728,600 bolívares (final 1946-47 estimate: 1,038,991,054 bolívares). The treasury surplus on April 30, 1947, totaled 212,198,181 bolívares as against a bonded domestic debt of 24,500,000 bolívares on Jan. 31, 1946. There is no foreign debt. Venezuela's excellent financial position is largely due to its revenue from taxes on oil and other minerals. British investments on Dec. 31, 1947, were £17,903,263; American, in 1942, \$262,376,000.

Oil production increased from 116,000,000 barrels in 1931 to 435,000,000 in 1947. In addition to oil, Venezuela has gold mines in the region southwest of the Orinoco delta. Output in 1947 was 21,864 troy oz. Of minor importance are bauxite, coal, copper, iron, tin, asbestos and asphalt. Diamond production in 1947 was 61,633 carats.

Much of the country is covered by forests still barely exploited, particularly south of the Orinoco. One of the oldest industries is the pearl fisheries off Margarita, Coche and Cubagua islands.

TOPOGRAPHY AND CLIMATE. An unusual setting of mountain systems breaks Venezuela into four distinct areas: (1) the Maracaibo lowlands; (2) the mountainous region in the north and northwest; (3) the Orinoco basin with the llanos (vast grass-covered plains) on its northern border and great forest areas in the south and southeast; (4) the Guiana highland, south of the Orinoco, accounting for nearly half the national territory. About 80 percent of Venezuela is drained by the Orinoco and its 400 tributaries. The coast line, 1,876 miles long, is indented in the northwest by the Gulf of Maracaibo. A narrow channel

joins the gulf to Lake Maracaibo, which is nearly the size of Lake Ontario.

The climate is tropical and unhealthful except where modified by altitude; it approaches the mild temperate in the higher western mountains. Most rainfall occurs between April and October, and the rest of the year is dry. At La Guaira, the mean annual temperature is 81°, at Caracas, 70°, at Cumaná, 83°.

Yugoslavia (Republic)

(Federationa Narodna Republika
Jugoslavija)

Area: 99,044 square miles.*

Population (census 1948): 15,751,953 (1931: Serbian, 46%; Croat, 28.5%; Slovene, 8.5%; German, 3.6%; others [Magyar, Albanian, Rumanian, Czech], 13.4%).

Density per square mile: 159.0.*

Chairman of Presidium of National Assembly: Ivan Ribar.

Prime Minister: Josip Broz (Tito).

Principal cities (census 1948): Belgrade (Beograd), 388,246 (capital); Zagreb, 290,417 (Croat commercial center); Ljubljana, 120,944 (Slovenian industrial center); Sarajevo, 118,158 (Bosnian manufacturing center); Subotica, 112,551 (wheat, livestock).

Monetary unit: Dinar.

Languages: Serbo-Croat, Slovene, Macedonian (all official).

Religions (1931): Serbian-Orthodox, 48.7%; Roman Catholic, 37.45%; Mohammedan, 11.2%; Protestant, 1.66%; Jewish, .49%; Greek Catholic, .32%; others, .18%.

*Including 1947 treaty awards.

HISTORY. Yugoslavia, twice the size of Pennsylvania and fronting on the Adriatic Sea opposite Italy, was formed in 1919 out of some of Europe's oldest trouble spots in the Balkans. After a brief and unstable history of 25 years, it emerged from World War II as a Russian satellite. World amazement, however, followed an attack made June 28, 1948, by the Soviet-dominated Cominform on Marshal Tito and the Yugoslav Communist party for inspiring a "hateful" policy against the Soviet Union and retreating from the Communist line in foreign and domestic policies. Unlike other officials similarly attacked by Soviet organs in the past, however, Tito denounced the Cominform's action and still continued in full power.

The 1919 components of Yugoslavia were the old kingdoms of Serbia and Montenegro, and the following: Bosnia-Herzegovina, formerly administered jointly by Austria and Hungary; Croatia-Slavonia, which had had limited autonomy under Hungary; and Slovenia and Dalmatia, formerly administered by Austria.

Alexander I, son of King Peter of Serbia, became the first king of the new country

on Aug. 16, 1921. His reign was a rocky one because the Croats, under Dr. Stephen Radić, unceasingly sought autonomy. Finally, a Croat assassinated Alexander in Marseille in Oct., 1934, and since his son Peter was a minor, a regency was set up under Prince Paul, the new king's uncle.

After pursuing an increasingly pro-Axis policy under the regent, Yugoslavia signed the Axis Pact on March 25, 1941; this caused the overthrow of the government two days later. On April 6 the country was invaded by the Nazis and was speedily occupied. While the king and government fled to the Near East and later to London, Yugoslavia was divided into German, Italian, Hungarian and Bulgarian occupation zones. Puppet regimes were established in Croatia and Serbia.

Inside Yugoslavia, the Axis' occupation was fought by two guerrilla armies—the Chetniks under Draža Mihailović, who supported the monarchy; and the Partisans under Marshal Tito (Josip Broz), who leaned toward Russia. These two groups fought not only the Germans, but also each other. In Nov., 1943, Tito established an Executive National Committee of Liberation to act as a provisional government, thus repudiating King Peter in exile.

In the elections of Nov. 11, 1945, Tito's forces won overwhelmingly, partly because the monarchist factions boycotted the balloting. Convening on Nov. 29, the new Assembly abolished the monarchy and set up the Federal People's Republic of Yugoslavia. Tito was named prime minister and his government won British and U. S. recognition.

The Tito government embarked upon an internal policy of ruthless oppression and elimination of opposition factions, including the summary trial and execution of Mihailović in 1946. In April, 1947, it initiated a five-year plan aimed at improvement of agriculture and heavy expansion of industry. Conflict soon arose within the government as to the rate at which socialization should be pushed, and the dismissal in May, 1948, of officials favoring an intensified program led in part to the Cominform blast at Tito the following month.

Externally the government pursued, until 1948, its uncompromising support of Moscow, as manifested by Yugoslav aid to anti-government Greek guerrillas, which had led to a U.N. inquiry in 1947. Soviet support enabled the nation to secure most of Italian Istria under the 1947 peace treaty, but efforts to secure sovereignty over the key port of Trieste were unsuccessful. A promise of improved relationship with the U. S. followed a settlement in July, 1948, whereby Yugoslavia agreed to pay U. S. financial claims in return for receiving approximately \$57,000,000 in gold

and assets frozen by Washington during World War II.

GOVERNMENT AND DEFENSE. The constitution of Jan. 31, 1946, is derived from Moscow. There is a federal assembly with one representative for each 50,000 electors in the country. There is a "house of the peoples" in which the six federal units—Serbia, Croatia, Slovenia, Bosnia-Herzegovina, Macedonia and Montenegro—each have 25 representatives, while three other areas have a total of 25. The presidium, a joint committee of both houses, carries on when parliament is out of session, but actual control of the country is in the hands of the Yugoslav Communist Party.

The army, based upon the National Liberation Army and partisan detachments which at one time had a strength of about 800,000, was unofficially estimated to number from 300,000 to 400,000 in 1948, including police forces. Equipment generally is poor. The air force had about 1,000 planes, with many Russian models. The navy was believed to include a destroyer, 6 submarines and two corvettes on Dec. 31, 1947. It received several small ships from the Italian fleet in 1948.

SOCIAL AND ECONOMIC CONDITIONS. Education on the elementary level is compulsory and free. In 1946-47 there were 10,747 elementary schools with 1,500,000 pupils, 149 grammar schools with 257,937 pupils, 260 secondary schools with 17,523 pupils, and 169 secondary technical schools with 30,729 pupils. The various universities and technical colleges had a total enrollment of 38,192.

Agriculture occupies about 80 percent of the population. The total area under cultivation in 1939 was 58.9 percent. The principal crops are corn, wheat, sugar beets, hemp, hops, opium (in Macedonia) and tobacco (chiefly in Macedonia and Herzegovina). Wheat production in 1946 was 1,986,000 short tons. Other important crops are barley, beans, potatoes, flax, clover and lucerne. Excellent wines are produced in Dalmatia and Herzegovina and along the Danube. The fruit industry is important, especially in Serbia and Bosnia.

Manufactures are limited for the most part to consumers' goods. Legislation passed Dec. 5, 1946, nationalized all private economic enterprises, public works and industries in 42 branches of the national economy including mining, metallurgy, all industries processing natural products, food processing, beverages, building, transportation, and all land, sea and air communications.

Yugoslavia has only limited access to ports on the Adriatic because of the difficulty in crossing the coastal range with railways and highways. Waterways, especially the Danube, are important. The merchant marine in 1940 numbered 169 vessels of 483,000 gross tons. Wartime losses were about 202,000 tons. Railway mileage in 1947 totaled 6,717, mostly state-owned. Main highway mileage was 20,646.

Exports in 1939 totaled \$125,419,000, of which 32 percent went to Germany; imports were \$108,069,000, of which 48 percent came from Germany. Major exports were lumber, wood products, live animals, copper ore, tobacco and foodstuffs. Major imports were textiles, iron and steel products, coal, vehicles and machinery. Most of the nation's postwar trade has been with the Soviet Union and its satellites, statistics for which are not available.

The 1948 budget balanced with estimated revenues and expenditures of 124,990,000,000 dinars. The national debt in 1939 was 24,620,000,000 dinars.

Yugoslavia is the Balkans' principal mineral producer. Production has been as follows in recent years, in short tons: copper (1944 smelter production) 24,000, bauxite (1945) 165,000, chromite (1943) 71,500, lead (1940 smelter production) 36,200, iron ore (1941) 550,000, coal (1941) 8,030,000. No postwar production figures have been released. Many rushing mountain streams make a high potential of hydroelectric power, used frequently in the development of mining.

Forests cover about 30 percent of the country, with beech, fir and oak the most common trees.

TOPOGRAPHY AND CLIMATE. About half of Yugoslavia is mountainous. In the north, the Dinaric Alps rise abruptly from the sea and progress eastward as a barren limestone plateau called the Karst. Montenegro is a jumbled mass of mountains, containing also some grassy slopes and fertile river valleys. Southern Serbia, too, is mountainous. A rich plain in the north and northeast, drained by the Danube, is the most fertile area of the country.

The Danube and tributaries—the Drava, Sava and Morava—in the northeast are the principal rivers. On the Adriatic, Yugoslavia's climate is mild and Mediterranean, but in the interior the winters are cold and the summers hot. January temperatures in Belgrade average about 30°, and summer temperatures are usually in the 70's. Rainfall is heaviest throughout the country from October to January.

Explorations and Discoveries

Africa

Country or place	Event	Explorer or discoverer	Date
Sierra Leone	Visited	Hanno, Carthaginian seaman	c. 520 B.C.
Congo River	Mouth discovered	Cão, Portuguese navigator	c. A.D. 1484
Cape of Good Hope	Doubled	Bartholomeu Diaz, Portuguese navigator	1488
Gambia River	Explored	Mungo Park, Scottish explorer	1795
Sahara Desert	Crossed	Denham and Clapperton, English explorers	1822-23
Zambezi River	Discovered	Livingstone, Scottish explorer	1851
Sudan	Explored	Barth, German explorer	1852-55
Victoria Falls	Discovered	Livingstone	1855
Lake Tanganyika	Discovered	Burton and Speke, British explorers	1858
Congo River	Traced	Stanley, British explorer	1877

Asia

Punjab (India)	Visited	Alexander the Great	327 B.C.
China	Visited	Marco Polo, Italian traveler	c. A.D. 1272
Tibet	Visited	Odoric, Italian monk	c. 1325
Southern China	Explored	Conti, Italian adventurer	c. 1440
India	Visited by Cape route	Vasco da Gama, Portuguese navigator	1498
Japan	Visited	St. Francis Xavier of Spain	1549
Arabia	Explored	Niebuhr, German explorer	1762
China	Explored	Richthofen, German scientist	1868
Mongolia	Explored	Przhevalsky, Russian explorer	1870-73
Central Asia	Explored	Hedin, Swedish scientist	1890-1908

Europe

Shetland Islands	Visited	Pytheas of Massilia (Marseille)	c. 325 B.C.
North Cape	Rounded	Ottar, Norwegian explorer	c. A.D. 870
Iceland	Colonized	Norwegian noblemen	c. 890-900

North America

Greenland	Colonized	Eric the Red, Norwegian navigator	c. A.D. 985
Labrador; Nova Scotia (?)	Discovered	Leif Ericsson, Norwegian explorer	1000
West Indies	Discovered	Christopher Columbus, Italian navigator	1492
North America	Coast discovered	John Cabot, for British	1497
Pacific Ocean	Discovered	Balboa, Spanish explorer	1513
Florida	Explored	Ponce de León, Spanish explorer	1513
Mexico	Conquered	Cortez, Spanish adventurer	1519
St. Lawrence River	Discovered	Cartier, French navigator	1534
Southwest U.S.	Explored	Coronado, Spanish explorer	1540-42
Colorado River	Discovered	Alarcón, Spanish explorer	1540
Mississippi River	Discovered	Hernando de Soto, Spanish explorer	1541
Frobisher Bay	Discovered	Frobisher, English seaman	1576
Maine Coast	Explored	Champlain, French explorer	1604
Jamestown, Va.	Settled	Smith, English colonist	1607
Hudson River	Explored	Hudson, English navigator	1609
Hudson Bay (Canada)	Discovered	Hudson	1610
Baffin Bay	Discovered	Baffin, English navigator	1616
Lake Michigan	Navigated	Nicolet, French explorer	1634
Arkansas River	Discovered	Marquette and Joliet, French explorers	1673
Mississippi River	Explored	LaSalle, French explorer	1682
Bering Strait	Discovered	Bering, Danish explorer	1728
Alaskan Coast	Sighted	Gvosdeff, Russian sailor	1731
Mackenzie River (Canada)	Discovered	Mackenzie, Scottish-Canadian explorer	1789
Northwest U.S.	Explored	Lewis and Clark	1804-06
Northeast Passage (Arctic Ocean)	Navigated	Nordenskiöld, Swedish explorer	1879
Greenland	Explored	Peary, American explorer	1892
Northwest Passage	Navigated	Amundsen, Norwegian explorer	1906

Country or place	Event	Explorer or discoverer	Date
South America			
Continent	Visited	Columbus, Italian navigator	1498
Brazil	Discovered	Cabral, Portuguese explorer	1500
Peru	Conquered	Pizarro, Spanish explorer	1532-33
Amazon River	Explored	Orellana, Spanish explorer	1541
Cape Horn	Discovered	Schouten, Dutch navigator	1615
Oceania			
New Guinea	Visited	Menezes, Portuguese explorer	1526
Australia	Visited	Jansz, Dutch explorer	1606
Tasmania	Visited	Tasman, Dutch navigator	1642
Australia	Explored	Sturt, English explorer	1828
Australia	Explored	Burke and Wills, Australian explorers	1861
Arctic, Antarctic and Miscellaneous			
Ocean exploration	Expedition	Magellan's ships circumnavigated the globe	1519-22
Spitsbergen	Visited	Barents, Dutch navigator	1596
(Arctic Europe)			
Antarctic Circle	Crossed	Cook, English navigator	1773
Antarctica	Discovered	Bellingshausen, Russian navigator	1820-21
Antarctica	Explored	Wilkes, American explorer	1840
North Pole	Discovered	Peary, American explorer	1909
South Pole	Discovered	Amundsen, Norwegian explorer	1911

The Seven Wonders of the World

Monuments and works of art which gained pre-eminence during the Alexandrian era.

THE PYRAMIDS OF EGYPT

A group of three pyramids, *Khufu*, *Khafra* and *Menkaura* at Giza, outside modern Cairo, is often called the first wonder of the world; it is also the oldest and only surviving "wonder." The largest pyramid, built by Khufu (Cheops), had an original estimated height of 482 ft. (now approximately 450 ft.). The exact date of its construction is unknown but has been estimated at 4700 B.C. The other two were built possibly 100 to 150 years later.

HANGING GARDENS OF BABYLON

Often listed as the second wonder, these gardens were supposedly built by Nebuchadnezzar about 600 B.C. to please his queen, Amuhia. They are also associated with the mythical Assyrian Queen, Semiramis. Archeologists surmise that the gardens were laid out atop a vaulted building, with provisions for raising water. The terraces were said to rise from 75 to 300 ft.

The Walls of Babylon, also built by Nebuchadnezzar, are sometimes referred to as the second (or the seventh) wonder instead of the Hanging Gardens.

STATUE OF ZEUS (JUPITER)

AT OLYMPIA

The work of Phidias (5th century B.C.), this colossal figure in gold and ivory was reputedly 40 ft. high. All trace of it is lost, except for reproductions on coins.

TEMPLE OF ARTEMIS (DIANA)

AT EPHEBUS

A beautiful structure, begun about 350 B.C. in honor of a non-Hellenic goddess who later became identified with the Greek goddess of the same name. The temple, with Ionic columns 60 feet high, was destroyed by invading Goths A.D. 262.

MAUSOLEUM AT HALICARNASSUS

This famous monument was erected by Queen Artemisia in memory of her husband, King Mausolus of Caria in Asia Minor, who died in 353 B.C. Some remains of the structure are in the British Museum. This shrine is the source of the modern word "mausoleum."

COLOSSUS AT RHODES

This bronze statue of Helios (Apollo), about 105 ft. high, was the work of the sculptor Chares, who reputedly labored for 12 years before completing it in 280 B.C. It was destroyed during an earthquake in 224 B.C.

PHAROS OF ALEXANDRIA

The seventh wonder was the Pharos (lighthouse) of Alexandria, built by Sosthenes of Cnidus during the 3rd century B.C. on the island of Pharos off the coast of Egypt. It was destroyed by an earthquake in the 13th century.

Population, Land Areas of the World and World Elevations

Area	Estimated population, in thousands	Approximate area, in thousands of sq. mi.	Percent of total land area.	Population density per sq. mi.	Highest Elevation, feet	Lowest	Dimensions, miles East-West North-South
WORLD	2,278,973	57,215	100.0	39.6	Mt. Everest, Asia, 29,002	Dead Sea, Asia, below sea level	24,902 24,860
ASIA, excluding Asiatic U.S.S.R.; including Philippines and Neth. Indies	1,193,564	11,057	19.3	107.9	Mt. Everest, Tibet-Nepal, 29,002	Dead Sea, Palestine-Trans-Jordan, below sea level	5,400* 5,300*
AFRICA	170,784	11,611	20.3	14.7	Mt. Killimanjaro, Tanganyika, 19,319	Quattara Depression, Egypt, 440 below sea level	4,600 5,000
NORTH AMERICA	205,092	9,000	15.7	22.8	Mt. McKinley, Alaska, 20,300	Death. Valley, Calif., 275 below sea level	3,200 4,000
SOUTH AMERICA	97,229	6,862	12.0	14.2	Mt. Aconcagua, Argentina, 22,835	Sea level	3,200 4,600
ANTARCTICA	Uninhabited	5,000	8.8		Mt. Thorvald Nilson, 15,400	Sea level	
EUROPE, including Iceland; excluding European U.S.S.R.	389,226	1,907	3.3	204.1	Mt. Blanc, France, 15,781	Sea level	3,300† 2,400†
AUSTRALIA	7,580	2,975	5.2	2.5	Mt. Kosciuszko, 7,328	Lake Eyre, 38 below sea level	2,400 1,900
OCEANIA, including New Zealand, Hawaii, Guam, New Guinea, Caroline, Marshall and Mariana Is.	4,113	330	.6	3.6	Mauna Kea, Hawaii, 13,784	Sea level	
U.S.S.R.	211,385	8,473	14.8	24.9	Mt. Pobedy, 24,409	Caspian Sea, 86 below sea level	5,000 2,500

*Including Asiatic U.S.S.R.

†Including European U.S.S.R.

HIGHEST POPULATION DENSITIES
(per square mile)

Monaco	32,613.6	Netherlands	722.8	United Kingdom	516.3	San Marino	382.8
Vatican City	5,705.9	Belgium	712.4	Germany	460.1	Italy	382.4
Trieste	1,321.7	Japan	533.2	Tangier	431.0	Luxemburg	287.0

Representative Mountain Peaks of the World

Mountain peak	Range	Location	Height, feet
Everest	Himalayas	Tibet-Nepal	29,002
Godwin Austen (K2)	Himalayas	Dominion of India	28,250
Kanchenjunga	Himalayas	Nepal	28,140
Gurla Mandhata	Himalayas	Tibet	25,355
Tirich Mir	Hindu Kush	Pakistan	25,263
Minya Konka	.....	China	24,606
Muztagh Ata	Pamirs	Sinkiang	24,388
Chumalhari	Himalayas	Tibet-Bhutan	23,997
Muztagh (K5)	Kunlun	Sinkiang	23,890
Trisul	Himalayas	India	23,360
Aconcagua	Andes	Argentina	22,835
Ojos del Salado	Andes	Argentina-Chile	22,408
Huascarán	Andes	Peru	22,205
Kailas	Himalayas	Tibet	22,028
Llullaillaco	Andes	Argentina-Chile	22,014
Mercedario	Andes	Argentina	21,883
Tupungato	Andes	Argentina-Chile	21,489
Sajama	Andes	Bolivia	21,391
Chimborazo	Andes	Ecuador	20,577
McKinley	Alaska	Alaska	20,300
Logan	St. Elias	Canada (Yukon Territory)	19,850
Cotopaxi	Andes	Ecuador	19,344
Killimanjaro	.....	Tanganyika	19,319
Misti	Andes	Peru	19,167
Cayambe	Andes	Ecuador	19,016
Orizaba (Citlaltepetl)	Sierra Madre Oriental	Mexico	18,696
Elbrus	Caucasus	U.S.S.R.	18,468
St. Elias	St. Elias	Alaska-Canada	18,008
Vilcanota	Andes	Peru	17,998
Popocatepetl	Cordillera de Anáhuac	Mexico	17,883
Cerro de Cuz	Andes	Bolivia	17,828
Ixtaccihuatl	Cordillera de Anáhuac	Mexico	17,338
Tolima	Andes	Colombia	17,109
Dikh-Tau	Caucasus	U.S.S.R.	17,054
Kenya	.....	Kenya	17,040
Ruvenzori	Ruvenzori	Belgian Congo-Uganda	16,787
Kazbek	Caucasus	U.S.S.R.	16,545
Bona	St. Elias	Alaska	16,420
Klyuchevskaya	Kamchatka	U.S.S.R.	15,912
Savalan	Elburz	Iran	15,784
Blanc	Alps	France	15,781
Fairweather	St. Elias	Alaska	15,287
Markham	.....	Antarctica	15,102
Dashan	Simen	Ethiopia	14,958
Matterhorn	Alps	Switzerland	14,780
Whitney	Sierra Nevada	California	14,495
Elbert	Rockies	Colorado	14,431
Rainier	Cascades	Washington	14,408
Longs Peak	Rockies	Colorado	14,255
Colima	Sierra Madre Occidental	Mexico	14,239
Shasta	Sierra Nevada	California	14,161
Pikes Peak	Rockies	Colorado	14,110
Finsteraarhorn	Alps	Switzerland	14,026
Gannett Peak	Rockies	Wyoming	13,785
Mauna Loa	.....	Hawaii	13,675
Jungfrau	Alps	Switzerland	13,667
Cameroon	.....	British Cameroons	13,349
Erebus	.....	Antarctica	13,202
Robson	Rockies	British Columbia	12,972
Fujiyama (Fujisan)	.....	Japan	12,385
Cook	Southern Alps	South Island, New Zealand	12,349
Hood	Cascades	Oregon	11,253
Aneto (Maladetta)	Pyrenees	Spain	11,168

Large Islands of the World

Island and status	Location	Area, sq. mi.
GREENLAND (Danish colony)	North Atlantic	839,782
NEW GUINEA (Provisionally under Dutch crown [status unsettled], west part; U. N. trust territory under Australian administration, northeast part; Australian territory, southeast part)	Southwest Pacific	312,329
BORNEO (Provisionally under Dutch crown [status unsettled], south part; British protectorate and colony, north part)	South China Sea	290,285
MADAGASCAR (French colony)	Off east coast of Africa	228,589
BAFFIN (Canada, Northwest Territories)	Arctic Ocean	201,600
SUMATRA (Provisionally part of Republic of Indonesia, one of the United States of Indonesia)	Indian Ocean	163,145
HONSHU (Japanese home island)	Sea of Japan—Pacific	91,278
GREAT BRITAIN (Eng., Scotland, Wales)	Off coast of northwest Europe	88,133
VICTORIA (Canada, Northwest Territories)	Arctic Ocean	80,450
ELLESMERE (Canada, Northwest Territories)	Arctic Ocean	75,024
CELEBES (Provisionally part of East Indonesia, one of the U. S. of Indonesia)	Southwest Pacific	69,255
SOUTH ISLAND, NEW ZEALAND	South Pacific	58,093
JAVA (Provisionally part of Republic of Indonesia, one of the U. S. of Indonesia)	Indian Ocean	48,504
NORTH ISLAND, NEW ZEALAND	South Pacific	44,281
NEWFOUNDLAND	North Atlantic	42,734
CUBA (Republic)	Caribbean Sea	42,350
LUZON	Philippine Islands	40,814
ICELAND (Republic)	North Atlantic	39,688
MINDANAO	Philippine Islands	36,906
HOKKAIDO (Japanese home island)	Sea of Japan—Pacific	34,084
IRELAND (Eire, republic, south part; Northern Ireland, part of United Kingdom)	West of Great Britain	31,840
HISPANIOLA (Dominican Republic, east part; Haitian republic, west part)	Caribbean Sea	30,075
TASMANIA (Australian state)	South of Australia	26,215
BANKS (Canada, Northwest Territories)	Arctic Ocean	25,992
CEYLON (British dominion)	Indian Ocean	25,332
SAKHALIN (U. S. S. R.)	North of Japan	24,560
DEVON (Canada, Northwest Territories)	Arctic Ocean	20,484
TIERRA DEL FUEGO (East part to Argentina; west part to Chile)	Southern tip of South America	18,530
MELVILLE (Canada, Northwest Territories)	Arctic Ocean	16,164
SOUTHAMPTON (Canada, N. W. Territories)	Hudson Bay	16,114

Oceans and Seas

Name	Area, sq. mi.	Average depth, feet	Greatest known depth, ft.	Place of greatest known depth
Pacific Ocean	63,801,700	14,048	35,400	Off Mindanao
Atlantic Ocean	31,830,800	12,880	30,246	Off Puerto Rico
Indian Ocean	28,356,300	13,002	22,968	Off Sumatra-Java
Arctic Ocean	5,440,200	3,953	17,850	77° 45' N.; 175° W.
Mediterranean Sea*	1,145,100	4,688	15,564	Off Cape Matapan, Greece
Caribbean Sea	1,049,500	8,685	22,788	Off Cayman Islands
South China Sea	895,400	5,419	18,090	West of Luzon
Bering Sea	875,800	4,714	13,422	Off Buldir Island
Gulf of Mexico	618,200	4,874	12,744	Sigsbee Deep
Okhotsk Sea	589,800	2,749	11,400	146° 10' E.; 46° 50' N.
East China Sea	482,300	617	9,126	25° 16' N.; 125° E.
Hudson Bay	475,800	420	600	Near entrance
Sea of Japan	389,100	4,429	12,276	Central Basin
Andaman Sea	308,000	2,854	12,392	Off Car Nicobar Island
North Sea	222,100	308	2,165	Skagerrak
Red Sea	169,100	1,611	7,254	Off Port Sudan
Baltic Sea	163,000	180	1,380	Off Gotland

*Including Black Sea and Sea of Azov.

Famous Waterfalls of the World

Waterfall	Location	River	Height, feet
Angel	Venezuela	.....	3,300
Cuquenán, or Kukenam	Venezuela-British Guiana	Cuquenán	2,000
Sutherland	South Island, N. Z.	Arthur	1,904
Tugela	Natal, South Africa	Tugela	1,800
Ribbon (Yosemite)	California	Creek flowing into Yosemite	1,612
Upper Yosemite	California	Yosemite Creek, tributary of Merced	1,430
Gavarnie	Southwestern France	Gave de Pau	1,385
Takkakaw	British Columbia	Tributary of Yoho	1,200
Widow's Tears (Yosemite)	California	Tributary of Merced	1,170
Staubach	Switzerland	Staubach (Lauterbrunnen valley)	980
Trummelbach	Switzerland	Trummelbach (Lauterbrunnen)	950
Middle Cascade (Yosemite)	California	Yosemite Creek, tributary of Merced	910
Multnomah	Oregon	Multnomah Creek, tributary of Columbia	850
Vettisfos	Norway	Morkedöla	850
King Edward VII	British Guiana	Courantyne	840
Gersoppa	India	Sharavati	830
Kaeteur	British Guiana	Pataro	741
Kalambo	Tanganyika-N. Rhodesia	.....	705
Fairy (Mt. Rainier Park)	Washington	Stevens Creek	700
Maradalsfos	Norway	Stream flowing into Ejkisdalsvand (lake)	650
Skykkjefos	Norway	In Skykkjedal (valley) of Inner Hardanger Fiord	650
Terni	Italy	Velino, tributary of Nera	650
Maletsunyane (Le Bihan)	Basutoland, Africa	Maletsunyane	630
Bridal Veil (Yosemite)	California	Bridal Veil Creek, tributary of Merced	620
Nevada (Yosemite)	California	Merced	594
Voringfos	Norway	Bjorela	535
Skjaeggedalsfos	Norway	Tyssaa	525
Marina	British Guiana	Tributary of Kuribrong, a tributary of the Pataro	500
Tequendama	Colombia	Bogotá	450
King George's	Cape Province, South Africa	Orange	450
Herval Cascades	Brazil	.....	400
Guayra	Paraguay-Brazil	Paraná	374
Illilouette (Yosemite)	California	Illilouette Creek, tributary of Merced	370
Granite (Mt. Rainier Park)	Washington	Granite Creek	350
Splendor of Sun	Nikko, Japan	.....	350
Victoria	Southern Rhodesia	Zambezi	343
Comet (Mt. Rainier Park)	Washington	Van Trump Creek	320
Lower Yosemite	California	Yosemite Creek	320
Vernal (Yosemite)	California	Merced	317
Virginia	Northwest Territories, Canada	South Nahanni, tributary of Mackenzie	315
Lower Yellowstone	Wyoming	Yellowstone	308
Grand	Labrador	Hamilton	302
Sluiskin (Mt. Rainier Park)	Washington	Paradise	300
Snoqualmie	Washington	Snoqualmie	270
Seven Falls	Colorado	.....	266
Tallulah	Georgia	Tallulah	251
Shoshone	Idaho	Snake	195
Narada (Mt. Rainier Park)	Washington	Paradise	168
Niagara	New York-Ontario	Niagara	167
Tower (Yellowstone)	Wyoming	Tower Creek, tributary of Yellowstone	132

PRINCIPAL DESERTS OF THE WORLD

Desert	Location	Approximate size	Approximate elevation, ft.	Features
Atacama	North Chile	400 mi. long	7,000-13,500	Rugged. Rich in minerals, particularly nitrates.
Black Rock	Northwest Nevada	70 mi. long and in places 20 mi. wide, or about 1,000 sq. mi.	2,000-5,000	Usually dry, with a white alkali crust. Serves as the "sink" of the Quinn River and at times covered with water a few inches deep.
Colorado	Southeast California from San Geronio Pass to Gulf of California	200 mi. long and a maximum width of 50 mi.	Few feet above to about 2,000	Average 90° F. Has reached 125° F. in the shade. Contains Salton Sea (overflow of Colorado).
Dasht-i-Kavir	Southeast of Caspian Sea in Iran		1,000	A salt depression. Vast deposits of solid rock salt.
Dasht-i-Lut	Northeast of Kerman in Iran		3,000-5,000	Sand desert.
Gobi (Shamo or "Desert of Sand")	Covers most of Mongolia	800 by 400 mi., or at least 300,000 sq. mi.		Sandy soils with much alkali. Some well-watered areas. Several caravan routes. Fossil remains.
Great Arabian	Most of Arabia	1,500 mi. long	1,850	Series of arid plateaus with scattered oases.
Syrian (El Hamad)	North of 30° N. Latitude		3,000	Stony with numerous wadis (dry stream beds).
Nefud (Red Desert)	South of Jaufrert	400 mi. long and average of 200 mi. wide		Almost waterless but rich in pasture in the rainy season (winter and spring). Large sand dunes.
Dahna	Southeast of Nefud	400 by 30 mi.		Waterless but rich in pasture in winter and spring.
Rub' al Khali	South portion of Nejd	About one-half the continent	600-1,000	Areas of "fixed dunes" and stony ("gibbers") wastes.
Great Australian	Western portion of Australia		4,500	Salt desert with numerous salt flats. Some used in setting world automobile speed records.
(Includes: Great Sandy, Gibson, Great Victoria, Arunta,)				Mild climate. Red sand. Some vegetation and game.
Great Salt Lake	West of Great Salt Lake to Nevada-Utah line	80 by 50 mi.	Over 3,000	Flat sandy wastes interspersed with broad expanses of clay soil. Water found only in wells.
Kalahari	South Africa between the Orange and Zambezi Rivers	400 by 600 mi., or about 120,000 sq. mi.		Arid grazing land. Numerous sand dunes moving southeast.
Kara Kum (Desert of Khiva or "Black Sands")	Southwest Turkistan south of Lake Aral	110,000 sq. mi.	160 near Lake Aral to 2,000 in southeast	Temperature range 70°-125° F. during summer months. Hot dry alkali flats interspersed with salt-pans or lakes. Scanty vegetation.
Kizil Kum	Central Turkistan southeast of Lake Aral	370 by 220 mi., or about 70,000 sq. mi.		Mild climate. Named for its bright colorful rocks.
Mohave	North of Colorado Desert and south of Death Valley in southeast California	15,000 sq. mi.	High plateau 5,000	Varied surface. East Libyan desert is sand; central part contains rocky hills and mountains; west consists of low stony plains and dunes. Crossed by chain of oases. Well-marked caravan routes.
Painted Desert	Northeast Arizona	75 mi. wide	440 below sea level to 11,000 above with an average elevation of 1,400-1,600	Series of deep depressions, some below sea level.
Sahara	Northern states of Africa to about 15° N. Lat. and from Red Sea to the Atlantic Ocean	3,200 mi. greatest length along 20° N. Lat.; width varies from 800 to 1,400 mi. Area over 3,500,000 sq. mi.		Famous caravan routes through oases such as Kharga, Dakhla, Farafra, Bahariya, Siwa and Cufra.
Libyan	East portion of the Sahara west of Nile	More than 500,000 sq. mi.	2,500	Sand and rock desert with some small fertile oases.
Nubian	From Red Sea to great west bend of the Nile			Extremes of climate: -22°-86° F. in April. Uninhabited. Can be safely crossed only in winter. Marco Polo left a vivid description of this desert.
Takla Makan	S. Central Sinkiang in Tarim Basin	700 mi. long	About 500	Sandy with strips of cultivable land.
Thar (Indian)	Chiefly Rajputana, Dominion of India	About 300 mi. by 380 mi.		

Principal Rivers of the World

River	Source	Outflow	Approx. length, miles
Nile	Lake Victoria	Mediterranean Sea	4,000
Missouri-Mississippi	Source of Red Rock Creek, Montana	Gulf of Mexico	3,988
Amazon	Glacier-fed lakes in Peru	Atlantic Ocean	3,900
Ob	Altai Mts., U.S.S.R.	Gulf of Ob	3,200
Yangtze Kiang	Tibetan plateau	China Sea	3,100
Amur	Confluence of Shilka (U.S.S.R.) and Argun (Manchuria) Rivers	Tartary Strait	2,900
Congo	Between Lakes Nyasa and Tanganyika	Atlantic Ocean	2,900
Lena	Baikal Mts., U.S.S.R.	Arctic Ocean	2,800
Yenisei	Tannu Ola Mountains, western Mongolia	Arctic Ocean	2,800
Hwang Ho (Yellow)	East part of Kunlun Mts., west China	Gulf of Chihli	2,700
Niger	Border of Sierra Leone	Gulf of Guinea	2,600
Mackenzie	Head of Finlay River, British Columbia	Beaufort Sea (Arctic Ocean)	2,514
Mékong	Tibetan highlands	South China Sea	2,500
Missouri	Actual headwaters Red Rock Creek; beginning of Missouri at confluence of Gallatin, Madison, Jefferson Rivers	Mississippi River	2,475 (confluence) 2,723 (headwaters)
Mississippi	Lake Itasca, Minnesota	Gulf of Mexico	2,470
Paraná	Confluence of Paranaíba and Grande Rivers, southeast Brazil	Río de la Plata (Atlantic Ocean)	2,450
Murray	Australian Alps, New South Wales	Indian (Southern) Ocean	2,310
Irtish	Altai Mts., U.S.S.R.	Ob River	2,300
Volga	Valdai plateau, U.S.S.R.	Caspian Sea	2,300
Madeira	Confluence of Gauporé and Maumoré Rivers on Bolivia-Brazil boundary	Amazon River	2,000
St. Lawrence	St. Louis River, Minn.	Gulf of St. Lawrence	1,900
Rio Grande	San Juan Mts., Colorado	Gulf of Mexico	1,800
São Francisco	Southwest Minas Geraes, Brazil	Atlantic Ocean	1,800
Yukon	Junction of Lewes and Pelly, Yukon Territory	Bering Sea	1,800
Salween	Tibet, south of Kunlun Mountains	Gulf of Martaban	1,750
Danube	Black Forest, Germany	Black Sea	1,725
Euphrates	Dumlu Dagh (mountains), Turkey	Persian Gulf	1,700
Indus	Himalayas	Arabian Sea	1,700
Orinoco	Sierra Parima on Venezuela-Brazil boundary	Atlantic Ocean	1,700
Tocantins	Near Pyrenopolis, southeast Brazil	Pará River (Atlantic Ocean)	1,700
Brahmaputra	Himalayas	Ganges River (Bay of Bengal)	1,680
Si Kiang	Plateau of Yunnan, southwest China	China Sea	1,650
Nelson	Head of Bow River, west Alberta, Canada	Hudson Bay	1,600
Zambezi	11°21'S.; 24°22'E., Northern Rhodesia, Africa	Indian Ocean	1,600
Ganges	Himalayas	Bay of Bengal	1,540
Amu Darya (Oxus)	Nicholas Range, Pamir Mountains, U.S.S.R.	Lake Aral	1,500

River	Source	Outflow	Approx. length, miles
Paraguay	Mato Grosso, Brazil	Paraná River	1,500
Yapurá	Andes, Colombia	Amazon River	1,500
Arkansas	Central Colorado	Mississippi River	1,450
Colorado	Middle Park, northern Colorado	Gulf of California	1,440
Dnieper	Valdai Hills, U.S.S.R.	Black Sea	1,400
Rio Negro	Watershed between Orinoco and Amazon	Amazon River	1,400
Ural	Southern Ural Mountains, U.S.S.R.	Caspian Sea	1,400
Ohio-Allegheny	Plateau in Potter County, Pa.	Mississippi River	1,306
Orange	Basutoland, Africa	Atlantic Ocean	1,300
Irrawaddy	Confluence of N'mal and Mali Rivers, northeast Burma	Bay of Bengal	1,250
Columbia	Columbia Lake, British Columbia	Pacific Ocean	1,214
Saskatchewan	Western Alberta, Canada	Lake Winnipeg	1,205
Darling	Central part of Eastern Highlands, Australia	Murray River	1,160
Tigris	Taurus Mts., Turkey	Persian Gulf	1,150
Don	Lake Ivan, U.S.S.R.	Sea of Azov	1,100

Large Lakes of the World

Name and location	Area, sq. mi.	Length, miles	Maximum depth, feet	Elevation above sea level, feet
Caspian, U.S.S.R.-Iran	169,300	795	3,612	-86
Superior, U. S. A.-Canada	31,820	383	1,290	602
Aral, U.S.S.R.	26,233	280	222	155
Victoria, East Central Africa	26,200	250	270	3,720
Huron, U. S. A.-Canada	23,010	206	750	580
Michigan, U. S. A.	22,400	321	923	580
Baikal, U.S.S.R.	13,300	385	5,413	1,515
Tanganyika, East Central Africa	12,700	450	4,708	2,536
Great Bear, Canada	12,000	195	270*	391
Great Slave, Canada	11,170	325	—	495
Nyasa, Southern Africa	11,000	350	2,580	1,650
Erie, U. S. A.-Canada	9,940	241	210	572
Winnipeg, Canada	9,398	260	70	712
Ontario, U. S. A.-Canada	7,540	193	778	245
Balkhash, U.S.S.R.	7,115	443	36	900
Ladoga, U.S.S.R.	7,000	125	730	55
Onega, U.S.S.R.	3,764	145	408	125
Rudolf, Eastern Africa	3,475	185	—	1,250
Titicaca, Bolivia-Peru	3,200	125	892	12,507
Nicaragua, Nicaragua	3,089	110	200	135
Athabaska, Canada	3,058	195	—	699
Reindeer, Canada	2,444	155	—	1,150
Issyk-Kul, U.S.S.R.	2,230	115	2,300	5,400
Koko Nor, China	2,200	66	—	10,000
Vänern, Sweden	2,143	87	292	144
Winnipegosis, Canada	2,086	122	38	831
Bangweulu, East Central Africa	1,900	60	15	3,700
Nipigon, Canada	1,870	70	—	852
Manitoba, Canada	1,817	120	12*	813
Urmia, Iran	1,750*	80-90	16	—
Albert, Uganda, Africa	1,640	100	50	2,037
Dubawnt, Canada	1,600	65	—	500
Great Salt, U. S. A.	1,500	75	15-25*	4,200
Van, Turkey	1,453	80	—	5,643

*Average.

Selected Glaciers and Ice Fields of the World

Present-day glaciers and ice fields represent only a small remnant of the vast areas covered during the glacial epoch. The principal glacial areas are in the Antarctic, Greenland, nearly all the high mountain ranges, and many of the islands in the Arctic regions.

NORTH AMERICA

Alaska. The greatest number of the tens of thousands of glaciers in southern Alaska lie between 56° and 61° N, in mountains facing the North Pacific.

Malaspina extends about 50 mi. along the seaward base of Mt. St. Elias; it covers about 1,500 sq. mi. Part lies above the snow line (2,500 ft.), but most of it lies between the snow line and 1,500 ft. It is formed by coalescence of many valley glaciers.

Muir, on the south slope of St. Elias Mountains, covers over 350 sq. mi. and is about 50 mi. long, 25 mi. wide and 1,500 ft. deep. It was much visited prior to the earthquake in 1899 which shattered the glacier and increased the discharge of ice so that ships no longer found it safe to approach close to the face.

Hubbard, over 80 mi. in length, is the longest valley glacier yet reported.

United States. Within the U. S. glaciers are found chiefly on the high volcanic peaks of the northern Cascade Mountains. None is much longer than 2 mi. Mt. Rainier (Washington) has the largest single-peak system in the U. S.: 28 glaciers with a total area of about 50 sq. mi. and numerous permanent snow fields. Glacier Peak (Washington) has more than 50 glaciers within a 30-mi. radius, moving from a snow field over 10 sq. mi. in area which covers the mountain top and fills the ancient crater. Mt. Baker and Mt. Adams (Washington), Mt. Hood (Oregon) and Mt. Shasta (California) also support glaciers.

In the Rocky Mountains, many small glaciers move for short distances from the perennial snowfields. More than 60 small glaciers are located in Glacier Nat'l. Park.

Canada. In the Cascade Mountains, glaciers are more prevalent than in the U. S. portion of the range. There are also many small glaciers in the Canadian Rockies.

Greenland. About 86 per cent of the surface, or 720,000 sq. mi., is covered by an ice cap, a continuous mantle of ice that covers valleys and mountains alike, forming a gently-sloping plateau of ice 10,000 ft. above sea level at its center, where the ice is about 8,000 ft. thick. Over most of the area it is about 2,000-5,000 ft. thick. Tongues of ice move through valleys in the mountainous coastal areas and end in the sea, where they discharge great icebergs. Ice forms 186 mi. of coast between Cape York and Wandel Land.

In the Jacobshavn District, the tallest icebergs, some 330-450 ft., originate in Jacobshavn Glacier. One iceberg had a measured volume of 7,851,481 cu. yd., twice the volume of the concrete in Hoover Dam.

Other important districts are Upernivik, Godthaab, Fredrikshaab, and Julianshaab.

EUROPE

Iceland. Snow fields and glaciers cover 5,170 sq. mi. (about 13%) of the surface. More than 120 glaciers are known on the island.

Vatnajökull is the largest ice-covered area in Iceland (3,280 sq. mi.). The largest glacier of the group covers 150-200 sq. mi.

Other large glaciers or snowfields are: Myrdalsjökull, covering 390 sq. mi.; Hofsjökull, covering 520 sq. mi.; and Langjökull, covering 500 sq. mi.

Norway. Jostedalbrae is the largest continental European icefield (over 500 sq. mi.). From it, most glaciers extend to 150-200 ft. above sea level.

Folgefond, between Hardangerfjord and its branch, Sörfjord, covers 110 sq. mi. It is the most southerly large ice-covered area in Norway.

Svartisen is second in size to Jostedalbrae, covering 230 sq. mi.; its glaciers are the only ones in Europe which descend almost to sea level.

Alps. It is estimated that there are 2,000 separate glaciers and snow fields. The lowest point reached by Alpine glaciers varies, but it is as low as 3,200 ft. above sea level at Grindelwald. Average altitude is about 4,200 ft., and a perpetual snow line lies between 8,000 and 9,500 ft.

Aletsch Glacier is 10 mi. long and with its snow fields covers over 50 sq. mi. It is one of the finest glaciers in the Swiss Alps.

Unteraar and Viescher in the Bernese Oberland are each 10 mi. long.

Mer de Glace, on the north slope of Mt. Blanc, is 9¼ mi. long, covers 16 sq. mi., and descends to 3,770 ft. Average flow is 2 ft. per day in summer and autumn.

Caucasus. There are an estimated 900 glaciers in the western half of the middle Caucasus, few in the eastern half. All glaciers in the central Caucasus are estimated to cover 625-650 sq. mi. Maliev, on Mt. Kazbek, is 36 mi. long. Bezingl (Ullu), 10.5 mi. long, descends to 6,535 ft.; Karagom, 9.5 mi. long, to 5,790 ft.; Leksy, 7.5 mi. long, to 5,690 ft.; and Tsey, 6 mi. long, to 6,730 ft.

ASIA

Thousands of little-known small glaciers, as well as some of the largest known, exist on the high mountains of Asia. Baltoro and Biafo in the Central Karakorum Range

(Kashmir) are among the largest existing glaciers. Rongbuk, on the north slope of Mt. Everest (Himalayas), ends at about 16,500 ft. Kyetrack, also on Mt. Everest, ends at about 15,400 ft.

NEW ZEALAND

New Zealand has a glacial system of some magnitude on South Island. Tasman, the largest glacier, is 18 mi. long, has a maximum width of 2 mi., and moves down the slope of Mt. Cook in the Southern Alps. Murchison, located near Mt. Cook, is

11 mi. long. Fox is 9.7 mi. long, covers 17 sq. mi., and ends 670 ft. above sea level, the lowest point attained by any glacier outside the Arctic and Antarctic regions. Franz Joseph is 8.5 mi. long, covers 16 sq. mi., and ends 690 ft. above sea level.

ANTARCTICA

Probably fewer than 100 of the 5,000,000 sq. mi. are free from permanent ice covering. It is doubtful if the ice is more than 5,000 ft. thick except in basins. Ice fronts vary from 100-400 mi. in width at the sea.

Volcanoes of the Earth

There are approximately 430 volcanoes (275 in the Northern Hemisphere and 155 in the Southern) with recorded eruptions in historical times. Of the 2,500 recorded eruptions, more than 2,000 have taken place in the Pacific area. Of known active volcanoes, 80 are of the submarine type.

ATLANTIC-INDIAN AREA

Mediterranean Region

Italy: Mt. Vesuvius, southeast of Naples (3,858 ft.). Only active volcano on mainland of Europe. Pompeii buried by an eruption, A.D. 79. Latest eruption in 1944.

Sicily: Mt. Etna, eastern Sicily (10,741 ft.). Two new craters formed in eruptions of Feb.-Mar., 1947.

Lipari Islands (north of Sicily): Stromboli (about 3,000 ft.). Called "Lighthouse of the Mediterranean."

Atlantic Area

Canary Islands: Pico de Teide (Teneriffe), on island of Teneriffe (12,192 ft.).

Cape Verde Islands: Fogo (over 8,000 ft.). Severe eruption in 1857.

Iceland: At least 25 volcanoes active in historic times. Has exceeded all other volcanic areas in output of lava. These volcanoes very similar to those in Hawaii.

Hekla (4,747 ft.). Several craters, largest about 1½ mi. in circumference. Most recent eruptions reported in 1947-48.

Skaptarjökull. Series of volcanoes near Skaptar; erupted in 1783 with large loss of life.

Askja (4,600 ft.). Largest in Iceland.

Jan Mayen Island: Beerenberg, northern part of island (over 8,000 ft.). Extinct.

British Cameroons: Mt. Cameroon (13,349 ft.). Has several craters. Last erupted in 1922.

Lesser Antilles (West Indian Islands): Mt. Pelée, in northwestern Martinique (about 4,400 ft.). Eruption in 1902 destroyed town of St. Pierre and killed approximately 40,000.

Indian Ocean Region

Comoro Islands (east of northern Mo-

zambique): One volcano, Kartala (over 8,500 ft.). Visible for over 100 miles. Last erupted in 1904.

Réunion Island (east of Madagascar): Piton de la Fournaise (Le Volcan) (8,610 ft.). Eruptions in the form of large lava flows.

Tanganyika Territory: Kilimanjaro (19,319 ft.). Extinct. Highest mountain in Africa.

THE PACIFIC AREA

Northwest Portion

Kamchatka: 14-18 active volcanoes.

Shiveluch (over 10,500 ft.). Most northerly volcano of Kamchatka group.

Klyuchevskaya (Kluchev) (15,912 ft.). Highest peak in Siberia; called the "Etna of Kamchatka." Reported active in 1946.

Koryatskaya (over 11,500 ft.). Violent eruption in 1895.

Kurile Islands: At least 13 active volcanoes and several submarine outbreaks.

Japan: at least 33 active vents.

Fujiyama (Fujisan), southwest of Tokyo (12,385 ft.). Symmetrical in outline, snow-covered. Regarded as a sacred mountain.

Adzumayama (7,733 ft.). Eruption in 1900 killed 82.

Asamayama (8,182 ft.). Continuously active; violent eruption in 1783; latest in 1947.

Asosan (5,223 ft.). Crater 10 by 15 miles is the largest known in the world; erupted 1947.

Bandaisan, about 125 miles north of Tokyo (9,037 ft.). Violent eruption in 1888 devastated a 27-square-mile area.

Two volcanic islets south of Japan emerged in the ocean for a brief time in 1946, then submerged.

Ryukyu archipelago: Nakano-shima (3,485 ft.); Suwanose-shima (2,697 ft.).

Bonin (Ogasawara) Islands: Mt. Suribachi, on Iwo Jima (546 ft.). A sulfurous steaming volcano. Raising of U. S. flag over Mt. Suribachi was one of the dramatic episodes of World War II.

New Britain archipelago: Numerous active vents, including Father, on New Britain (7,500 ft.).

Santa Cruz Islands: Tinakula (2,200 ft.).

New Hebrides: Lopevi (4,755 ft.).

Samoan archipelago: Savail. An eruption in 1905 did considerable damage. Niuafouou (Tin Can) between Samoa and Fiji Islands has a crater 6,000 feet below and 800 feet above water. Active in 1946.

Philippine Islands: 98 eruptive centers.

Taal, on Volcano Island in Lake Bombon (about 1,000 ft.). Crater over 7,500 ft. in diameter.

Mayon, in southeastern Luzon (7,946 ft.). An almost perfect cone. Continuous mild activity. In 1897 there was a destructive eruption. Considerable activity in 1947.

Moluccas: A volcanic chain of islands which contains several active volcanoes.

Hawaiian Group:

Mauna Loa (13,675 ft.). Also called "Long Mountain." Discharges more lava than any other volcano. Largest volcanic mountain in the world in cubic content. Its crater is 3.7 sq. mi. in area.

Mauna Kea (13,784 ft.). Highest mountain in group.

Hualalai (8,269 ft.). Has many small pit craters. Only lava flow in historic times was in 1801.

Kilauea (4,090 ft.). A vent in side of Mauna Loa but apparently erupts independently of it. One of the most spectacular and active craters. Crater has an area of 4.14 sq. mi.

Southwest Portion

Sumatra: Ninety volcanoes have been discovered; 12 are now active. The most famous, Krakatoa, is a small volcanic island in the Sunda Strait. Numerous volcanic discharges occurred in 1883. One explosion caused the disappearance of the highest peak and the northern part of the island. Fine dust was carried around the world in the upper atmosphere. Over 36,000 persons lost their lives in resultant tidal waves, which were felt as far away as Cape Horn. Active again in 1928.

Java: Thirteen of 125 volcanic centers are active. Few serious eruptions. Galunggung is famous for two destructive eruptions in 1822. It is thought that over 100 villages and about 4,000 lives were lost.

Lesser Sunda Islands: Fifteen eruptive cones. Tamboro on Soembawa (Sumbawa) (about 9,000 ft.) was 13,000 ft. prior to a severe eruption in 1815, which ejected an estimated 36 cu. mi. of material.

Melanesian area: Volcanoes are located on New Guinea, New Hebrides, Santa Cruz, Solomons, and on numerous other small islands.

New Zealand: Tarawera, on North Island. Severe eruption in 1886 destroyed the famous pink and white sinter terraces of Rotomahana, a hot lake.

Ngauruhoe (7,515 ft.). Emits steam and vapor incessantly.

Northeast Portion

Aleutian area: There are 32 active vents known, and numerous inactive cones in remarkably straight line.

Shisaldin, on Unimak (8,683 ft.). Latest eruption Jan., 1947.

Bogosloff, on Bogosloff island (Castle) (about 1,000 ft.). Mountain first appeared after an eruption in 1796.

Alaska:

Wrangell (14,005 ft.).

Katmai (about 7,500 ft.). On June 6, 1912, a violent eruption occurred, during which the "Valley of Ten Thousand Smokes" was formed.

United States: Lassen Peak, in California (10,453 ft.). Only observed active volcano in the United States. Last period of activity in 1914-17. Other mountains of volcanic origin include Mt. Shasta, Mt. Hood, Mt. Rainier, and the mountain that contains Crater Lake.

Mexico:

Popocatepetl (17,883 ft.). Crater 673 ft. deep and 2½ mi. in circumference. Not entirely extinct; steam still escapes.

Colima, in group of same name (14,239 ft.). Group has had frequent eruptions.

Orizaba (Citlatpetl) (18,696 ft.). Probably the most symmetrical volcanic cone.

Tuxtla (4,900 ft.). Had a violent eruption in 1793 but is now quiescent.

Parícutin. A new volcano. First appeared in Feb., 1943, in a cornfield. In less than a week a cone over 140 ft. high developed with a crater one quarter mile in circumference. Cone grew over 1,500 ft. in 1943. Still active and growing.

Guatemala:

Santa María Quezaltenango (12,361 ft.). Frequent activity between 1902-08 and 1922-28 after centuries of quiescence. Most dangerously active vent of Central America. Other volcanoes include Tajumulco (13,814 ft.) and Atitlán (11,633 ft.).

El Salvador: Active volcanoes include Izalco, "beacon of Central America," first appeared in 1770 and is still growing; San Salvador, which had a violent eruption in 1923 and Conchagua, which erupted with considerable damage early in 1947.

Nicaragua: Volcanoes include Telica (latest eruption in 1948), Coseguina, and Momotombo (4,126 ft.). Between Momotombo on the western shore of Lake Managua and Coseguina overlooking the Gulf of Fonseca, there is a string of more than 20 cones, many still active. One of these, Cerro Negro, erupted in July, 1947, with considerable damage and loss of life, and again in April, 1948.

Costa Rica: Four volcanic cones whose bases merge are Poás (8,895 ft.), Barba (9,280 ft.), Irazú (10,525 ft.), and Turrialba (11,350 ft.).

Southeast Portion

Colombia: Huila (18,700 ft.), a vapor-emitting volcano, and Tolima (17,109 ft.).

Ecuador:

Cotopaxi (19,344 ft.). Perhaps the highest active volcano in the world. Possesses a beautifully formed cone.

Cayambe (19,016 ft.). Almost on equator. Summit perpetually snow-covered.

Other volcanoes include **Tunguragua** (16,689 ft.), **Sangay** (17,470 ft.), and **Antisana** (over 18,000 ft.).

Peru and Bolivia: Many active volcanoes. **Misti**, near Arequipa, Peru (19,167 ft.). **Sajama**, in Bolivia (21,391 ft.).

Licancábur, in Bolivia (about 19,500 ft.).

Chile and Argentina: About 25 active or potentially active volcanoes.

Interesting Caves and Caverns of the World

Aggtelek. In village of same name, northern Hungary. Large stalactitic cavern about 5 miles long.

Altamira Cave. Near Santander, Spain. Contains animal paintings (Old Stone Age art) on roof and walls.

Antiparos. On island of same name in the Grecian Archipelago. Some stalactites are 20 ft. long. Brilliant colors and fantastic shapes.

Blue Grotto. On island of Capri, Italy. Cavern hollowed out in limestone by constant wave action. Now half filled with water because of sinking coast. Name derived from unusual blue light permeating the cave. Source of light is a submerged opening, light passing through the water.

Carlsbad Caverns. Southeast New Mexico. Largest underground labyrinth yet discovered. Three levels, 754, 900 and 1,320 feet below the surface.

Fingal's Cave. On island of Staffa off coast of western Scotland. Penetrates about 200 ft. inland. Contains basaltic columns almost 40 ft. high.

Ice Cave. Near Dobsina, Czechoslovakia. Noted for its beautiful crystal effects.

Jenolan Caves. In Blue Mountain plateau, New South Wales, Australia. Beautiful stalactitic formations.

Kent's Cavern. Near Torquay, England. Source of much information on Paleolithic man.

Luray Cavern. Near Luray, Virginia. Has large stalactitic and stalagmitic columns of many colors.

Mammoth Cave. Limestone cavern in central Kentucky. Cave area is about 10 miles in diameter but has at least 150 miles of irregular subterranean passageways at various levels. Temperature remains fairly constant at 54°F.

Peak Cavern or Devil's Hole. Derbyshire, England. About 2,250 ft. into a mountain. Lowest part is about 600 ft. below the surface.

Postumia (Adelsberg) Grotto. Near Postumia in Julian Alps, about 25 miles N.E. of Trieste. Stalactitic cavern, largest in Europe. **Piuca (Pivka)** River flows through part of it. Caves have numerous beautiful stalactites.

Singing Cave. Iceland. A lava cave; name derived from echoes of people singing in it.

Wind Cave. In Black Hills of South Dakota. Limestone caverns with stalactites and stalagmites almost entirely missing. Variety of crystal formations called "boxwork."

Wyandotte Cave. In Crawford county, southern Indiana. A limestone cavern with five levels of passages; one of the largest in North America. "Monumental Mountain," approximately 135 ft. high, is believed to be one of the world's largest underground "mountains."

Geysers

Geysers exist in many volcanic regions of the world such as Japan and South America, but their greatest development is in Iceland, New Zealand and Yellowstone National Park, Wyoming, U. S. A.

Iceland. The principal geyser area is about 30 miles northwest of Mt. Hekla, where there are more than 100 geysers and hot springs in about two square miles. The main ones are the following:

Great Geyser (Geysir). Sends up a column 160 to 180 ft. high intermittently from an opening more than 9 ft. across and about 70 ft. deep.

Strokkur (Churn). Constant bubbling and occasional eruptions.

New Zealand. There is a great profusion of boiling springs, steam jets and mud volcanoes northeast of Lake Taupo on North Island. Main geysers are **Waikite**, with a 30-35 ft. column, **Pohutu** and **Waimauku**.

United States

Yellowstone National Park, Wyoming. There are 120 named geysers in Yellowstone and perhaps half that number unnamed. Most of the geysers and the 4,000

hot springs are located in the western portion of the park. The most important ones are as follows:

Norris Geyser Basin has 18 or more geysers; the number varies. There are scores of steam vents and hot springs. *Valentine*, highest in basin, 75 ft. at 18-hour intervals; tube is 60 ft. long. *Minuté*, 15-20 ft. high, several hours apart. Others are small; these include *Steamboat*, *Fearless*, *Veteran*, *Vixen*, *Corporal* and *Monarch*. Some are dormant.

Lower Geyser Basin. In the 1870's it had 680 hot springs and geysers. Many now are only hot springs, but at least 18 are active geysers, *Fountain*, at one time very well known. Water thrown 75 ft. in all directions and at all angles. Now dormant. *Clepsydra*, very active; some eruption cycles last for several hours; maximum height 75 ft. *Great Fountain* plays every 12 to 13 hours for 30 minutes in spurts which rise from 60 to 80 ft.

Midway Geyser Basin has vast steaming terraces of red, orange, pink and other colors; pools and springs. *Excelsior Geyser* crater discharges boiling water into Fire-hole River at the rate of 6 cu. ft. per second.

Upper Geyser Basin includes: *Artemisia* sends up a column 35 ft. high for 10 to 15 minutes every 18 to 24 hours. *Fan* sends out fan-shaped eruptions about 60 ft. high every 2 or 3 days. *Riverside* has an unusual cone; throws water 75 ft. obliquely over the river from lower crater for half an hour. It has a remarkably regular interval of 8 hours between eruptions.

Rocket jets up to 70 ft. at intervals of 2 to 5 days. When its neighbor, *Grotto*, erupts simultaneously the jet is only 10 ft.

Grotto throws water 20 to 30 ft. for 15 minutes to 8 hours.

Giant erupts to 200 ft. Eruptions last an hour but are 7 days to 3 months apart. A single eruption has been estimated to contain 700,000 gallons.

Daisy sends water to a height of 75 ft. every 135 minutes.

Old Faithful sends up a column about 140 ft. high at average intervals of 65 minutes, varying from 35 to 80 minutes. Eruption lasts about 4 minutes. Discharges about 12,000 gallons of water at each eruption.

Giantess erupts like a small volcano every six to nine months. The eruption rises to a maximum height of 200 ft. and usually lasts 4½ hours.

Lion group: *Lion*, *Lioness*, *Big Cub* and *Little Cub* erupt irregularly from one to 18 times a day.

Castle is reported to have largest and most imposing cone of any active geyser in the world. Erupts twice a day to a height of 75 ft. but at times throws water continually to about 20 ft.

Mammoth Hot Springs. There are no geysers in this area. The formation is travertine. Sides of a hill are steps and terraces over which flow the steaming waters of hot springs laden with minerals. Each step is tinted by algae to many shades of scarlet, orange, pink, yellow and blue. Terraces are white where no water flows.

Other groups of geysers, hot pools and mud pots are located on the west shore of Shoshone Lake, on West Thumb Bay, at Mud Volcano, in the Grand Canyon of the Yellowstone, and on Mirror Plateau.

World Extremes of Climate

Highest recorded temperature:

World: 136° F. at Azizia, Libya, North Africa, September 13, 1922.

United States: 134° F. at Death Valley, California, July 10, 1913.

Lowest recorded temperature:

World: -90° F. at Verkhoyansk, Siberia, U.S.S.R., February 5 and 7, 1892; a temperature of -94° F. was reported in Siberia during the winter of 1946-47 but was not verified by the Soviet government.

United States: -66° F. at Yellowstone Park, Wyoming, February 9, 1933.

Highest mean annual temperature:

World: 86° F. at Massawa, Eritrea, Africa.

United States: 77.3° F. at Tavernier, Florida.

Lowest mean annual temperature:

World: -14° F. at Framheim, Antarctica.

United States: 26.9° F. at Mt. Washington, N. H. (14-year record).

Maximum rainfall for 24-hour period:

46 inches at Baguio, Luzon, Philippines, July 14-15, 1911.

Maximum recorded rainfall in one month:

241 inches at Cherrapunji, India, August, 1841 (over 150 inches fell in 5 consecutive days). Average annual rainfall is 426 inches.

Minimum recorded rainfall:

World: .04 inch at Iquique, Chile, average yearly fall during 40 years.

United States: 3.93 inches at Bagdad, California, the total for five years, 1909-13. Average annual precipitation for the United States is about 29 inches.

Louisiana is the wettest state, with an annual average (57 years) of 56.51 inches. Nevada is the driest state, with an annual average (59 years) of 8.99 inches. Highest local average annual rainfall in the United States was 150.73 inches at Wynncochee Oxbow, Washington, based on a 13-year record. Greatest 4-hour fall was at Lake Charles, La.—15½ inches—on June 19, 1947. Greatest 24-hour rainfall in the United States was 38.2 inches at Thrall, Texas, September 9-10, 1921. Heavy snowfall records include 60 inches in one day at Giant Forest, California; 42 inches in 2 days at Angola, New York; 54 inches in 3 days at The Dalles, Oregon; and 96 inches in 4 days at Vanceboro, Maine. In the New York City blizzard of Dec. 26, 1947, 25.8 inches of snow fell in about 20 hours, almost 5 inches more than fell in the blizzard of March, 1888. Greatest seasonal snowfall was 884 inches, over 73 feet, at Tamarack, California, during 1906-07.

Ancient Empires

The *Egyptian* and *Babylonian* empires, Near Eastern civilizations whose cultures mark the beginning of written history, had their origins in the nebulous period of ancient history prior to the year 4000 B.C. They developed rapidly in the fertile river valleys of the Nile in Egypt and the Tigris-Euphrates in Mesopotamia after the discovery of metals and the invention of writing. Their governments were all-powerful, with the people subjugated and without political rights. The Egyptians regarded their king as a god. In Babylon, the ruler was a priest-king, earthly representative of the gods. Nevertheless, these Near East cultures made great contributions in the eternal march of man; they advanced the arts of making and doing things, produced the earliest literature, developed the principles of law (the code of Hammurabi, Babylonian king of the 18th [or possibly 17th] century B.C., the oldest code of law) and science, learned the basic principles of art, and evolved early religious worship.

The influence of Babylon and Egypt was felt in the rise of the Semitic tribes of Syria, the Hittites in Asia Minor, and the people of the Aegean region. Between the years 1200 and 800 B.C., the small Syrian states grew to great power and then were overwhelmed by the great empire of the *Assyrians*, the warlike peasants of the Tigris valley, who took the lessons learned from the Babylonians and spread that culture over their domains. The Assyrians, like the Egyptians and the Babylonians, in turn fell under the power of the *Persian* kings in the century between 600 and 500 B.C. By 525 B.C., the Persian Empire extended from India to Egypt, the greatest the world had ever seen.

The lessons learned by these early Near Eastern civilizations were transmitted to Greece, which developed its illustrious empire in the Aegean region, after the inhabitants of the island of Crete had absorbed the Egyptian culture. The mainland Greeks overthrew the Cretans and in turn were succeeded by the Doric Greeks, who spread their culture across the Aegean, the Asia Minor coast, and into the Mediter-

anean and Black Sea regions. The characteristic Greek political institution was the city-state, first ruled by kings and often temporary monarchical tyrannies, and finally by the participation of free citizens. Literature and the arts flourished, and by the 5th century B.C., when Athens became the great city of the Greeks, drama had risen to full maturity with the great tragedies of Sophocles and Euripides and the comedies of Aristophanes. Architecture and art advanced apace. The Greeks, learning much from their Egyptian teachers, produced such superb buildings as the Parthenon and created amazingly beautiful statues through the use of living models. Religion, which was closely linked with art, also flourished, as did the development of philosophy, under the great Socrates (470?-399 B.C.), Plato (427?-347 B.C.), and Aristotle (384-322 B.C.). Wars weakened the city-states, and they fell to Alexander the Great in the 4th century B.C.

Last among the great ancient empires was the *Roman*, which developed in Italy and gained control over the Mediterranean region after absorbing the culture of Greece and combining with it new principles of law and art and teaching their new learning to the West. The development of the Roman civilization began in 510 or 509 B.C., when the peoples on the peninsula of Italy freed themselves from the rule of the Etruscans. The Romans, with a republican form of government, speedily conquered Italy and the Mediterranean region, and the Roman governors became men of great wealth, corrupting the city-state system and making it a graft-ridden machine of exploitation. The failure of the government to check this self-seeking influence brought on a revolt which resulted eventually in the rise of Julius Caesar to dictatorship in 46-44 B.C. Caesar's murder in the Senate at Rome was followed in 27 B.C. by the establishment of the one-man rule of Augustus over the Roman Empire. Legal practices were developed and became the foundations of modern law. Great roads, bridges and buildings were constructed. This great ancient civilization began to crumble in the 3d century A.D.

Languages of the World

Language	Number speaking	Language	Number speaking
American Indian: including Mayan, Quéchua and 750-1,000 languages and dialects	15,000,000	Indonesian: including Balinese, Bisayan, Ilocano, Javanese, Malay, Malagasy, Sundanese, Tagalog	80,000,000
Amharic (Ethiopia)	5,600,000	Iranian: including Baluchi, Kurdish, Persian, Pushtu	26,500,000
Annamese (Indo-China)	20,000,000	Italian	50,000,000
Arabic	58,000,000	Japanese	80,000,000
Bantu: including Swahili, Zulu (S. Africa)	45,000,000	Javanese	32,000,000
Bengali (India)	63,000,000	Kanarese (India)	13,400,000
Berber dialects (N. Africa)	6,000,000	Korean	27,000,000
Bihari (India)	28,000,000	Lahnda (India)	10,000,000
Bisayan (Philippines)	5,500,000	Malay (Neth. Indies)	10,000,000
Bulgarian	7,000,000	Malayalam (India)	10,000,000
Burmese	11,000,000	Marathi (India)	23,000,000
Catalan (Spain)	6,000,000	Munda (India)	5,000,000
Chinese: including Mandarin, Cantonese and others	450,000,000	Oriya (India)	9,600,000
Cushitic: including Somali (Ethiopia)	7,000,000	Persian	12,000,000
Czech	8,000,000	Polish	30,000,000
Dravidian: including Kanarese, Malayalam, Tamil, Telugu (India)	80,000,000	Portuguese	60,000,000
Dutch	10,000,000	Punjabi (India)	18,800,000
English	225,000,000	Pushtu (Afghanistan)	8,000,000
Ethiopian: including Amharic	6,400,000	Rajasthani (India)	15,225,000
Finno-Ugric: including Estonian, Finnish, Hungarian, Karelian, Lappish	21,500,000	Rumanian	16,000,000
Flemish (Belgium)	5,000,000	Russian	180,000,000
French	65,000,000	Serbo-Croatian (Yugoslavia)	15,000,000
German	100,000,000	Siamese	16,000,000
Greek	8,000,000	Spanish	110,000,000
Gujarati (India)	13,000,000	Sudanic: including Hausa (Central Africa)	75,000,000
Hausa (Central Africa)	9,000,000	Sundanese (Neth. Indies)	8,500,000
Hindustani (India)	140,000,000	Swahili (S. Africa)	8,000,000
Hungarian	13,000,000	Swedish	7,000,000
Indic: including Assamese, Bengali, Bihari, Gujarati, Hindustani, Lahnda, Marathi, Oriya, Punjabi, Rajasthani, Sindhi, Singhalese	325,000,000	Tai: including Siamese	18,000,000
		Tamil (India)	23,850,000
		Telugu (India)	27,000,000
		Tibeto-Burman: including Tibetan and Burmese	20,000,000
		Turkic: including Kazakh, Tatar, Turkish, Uzbek	42,000,000
		Turkish	18,000,000
		Uzbek (U.S.S.R.)	5,000,000
		Yiddish	5,000,000

Universities—Ancient and Modern

Universities, in the modern sense of the term, sprang up in the 12th and 13th centuries in response to the resurgence of learning that preceded the Renaissance in Europe. Procedure at the early universities was informal, with students gathering at some place in a city to listen to a pre-eminent teacher. There were no campuses, buildings or endowments. Actually, the term "university" once meant a guild or corporation; there were, in the medieval period, "universities" of bootmakers, weavers, etc. Thus the university of learning was similar in organization to the guilds. The students filled the role of apprentices and the teachers were the masters.

The first European university was that of Salerno in the 9th century, when it

was known as a school of medicine. By the 11th century, it had become one of the most famous medical schools of Europe.

University of Bologna. Organized in 1158 by students as a means of protection against the merchants and citizens of Bologna who had raised prices of foods and lodging. It was famous for its legal scholars. The students were organized into two guilds and exercised a great deal of authority over the administration and the professors; they controlled all academic matters except the granting of degrees.

Other Italian universities famed in the Middle Ages included those at Arezzo, Ferrara, Florence, Modena, Naples, Padua, Pavia, Perugia, Siena and Vicenza.

University of Paris. Originated between 1150 and 1170 in a cathedral school on the Ile de la Cité, it was later moved to the left (south) bank of the Seine, although it remained under the authority of the chancellor of Notre Dame. It developed into the most famous continental center of learning of its day. Its four principal schools were theology, medicine, law and arts. By the 14th century, the university had some 40 colleges, of which the *Sorbonne* became the most celebrated.

The universities of Paris and Bologna had a marked influence in the subsequent creation of other university centers. About 1200, there was a migration of students from Paris to *Oxford* (founded in the 12th century) and a decade or two later, from *Oxford* to *Cambridge* (also founded in the 12th century).

Other famous universities of the Middle Ages include the *University of Toulouse* (1233), *Salamanca* (1243), *Seville* (1254), *Orléans* (1305), *Valladolid* (1346), *Prague* (1347), *Kraków* (1364), *Vienna* (1364), *Erfurt* (1379), *Heidelberg* (1385), *Cologne* (1388), *Leipzig* (1409), *Rostock* (1419) and *Louvain* (1426).

The Renaissance

The Renaissance gave fresh impetus to the universities of Europe. In France three of importance arose in the 15th century: the *University of Aix* (in Provence); the *University of Poitiers* (1431) and the *University of Caen* (1437).

Other French institutions of note that rose in this era were at *Bordeaux* (1441), *Valence* (1452), *Nantes* (1463) and *Bourges* (1465). New European universities were also founded at *Trier* (1450), *Freiburg* (1455), *Ingolstadt* (1459), *Basel* (1460), *Budapest* (1475), *Mainz* (1476), *Uppsala* (1477), *Tübingen* (1477), *Copenhagen* (1479), *Wittenberg* (1502), *Frankfurt on Oder* (1506) and *Coimbra* (1537).

St. Andrews, founded in 1411, was the first university in Scotland. Others were the *University of Glasgow* (1453), the *University of Aberdeen* (1494) and the *College of Edinburgh* (1582). In Ireland, *Trinity College* was founded in Dublin in 1591.

Reformation and Post-Reformation

Until the Reformation, most of the institutions of higher learning in Europe were under the tutelage of the Catholic Church. After 1520, however, many established universities declared their independence of the Church. Cromwell's rule brought about new scholastic methods at both *Oxford* and *Cambridge* and the establishment of new colleges thoroughly imbued with Protestantism.

But the first Protestant university was

that of *Marburg*, Germany, founded in 1527. Other Protestant universities were: *Königsberg* (1544); *Jena* (1558); *Helmstedt* (1575); *Altdorf* (1575); *Gießen* (1607); *Strasbourg* (1621) and *Halle* (1693).

18th, 19th and 20th Centuries

Among the more famous institutions in this era was *Göttingen* (1736), whose school of history became celebrated throughout Europe. Others were: *Erlangen* (1743); *Berlin* (1809); *Lemberg* (Lwów) (1816); *Bonn* (1818); *Helsingfors* (1826); the *National University at Athens* (1837); *Bucharest* (1864); *Tokyo* (1868); *Sofia* (1888); *Kyoto* (1897), and *Constantinople* (or *Stamboul*) (1900).

Among the more famous British universities established in the 19th and 20th centuries were the *University of London* (1825); *Manchester* (1851); *Liverpool* (1881); the *Mason University College* in *Birmingham* (1900); *Leeds* (1904), and the *University College* in *Sheffield* (1905). The *University of Wales* is composed of colleges in *Aberystwyth*, *Bangor*, *Cardiff* and *Swansea*.

There are many important and large universities in the British dominions. In Canada, the famous *McGill University* in *Montreal* was founded in 1821. Others are the *University of Toronto* (1827); *Queens University* at *Kingston, Ont.* (1841); *Laval University*, *Quebec* (1852), and *Montreal University* (1876).

The early universities in India were patterned after London University rather than on the Oxford-Cambridge style, and were purely examining institutions. *Calcutta* and *Madras* universities were founded in 1857 as examining schools.

In Australia, the state plays an important role in the development of universities. The *University of Melbourne* (1853) has the largest enrollment. Among the others are *Adelaide* (1874); *Tasmania* (1890); *Queensland* (1909) and *West Australia* (1913).

There are also many well-endowed universities in New Zealand, South Africa, and other parts of the empire.

In 1755, Russia had only three universities—*Vilna* (1578), *Dorpat* (1632) and *Moscow* (1755). Other institutions developed later were the *University of Kharkov* (1804); *Kazan* (1804); *St. Petersburg* (1819); *St. Vladimir* in *Kiev* (1832); *Odessa* (1865); *Warsaw*, which is now Polish (1886) and *Tomsk*, in *Siberia* (1888). The building of universities after the Revolution of 1917 was spurred by the Soviet government.

In China, the growth of universities was hampered by the chaotic state of the government in the 1900's, the recurring civil wars and the conflict with Japan.

The United States

Universities in the United States marched in step with the progress of the nation. The early settlers brought a heritage of European culture which they planted in New England soil. The first university in the country was started as *Harvard College* in 1636, with an endowment totaling 800 pounds. Harvard was to become probably the most famous of the American universities, with an endowment in 1948 of more than \$183,000,000, a faculty of 2,250 members and a student enrollment of more than 12,000.

The *College of William and Mary* (1693) was the second institution of higher learning established in the colonies. Others started during the colonial period (current names only) are: *Yale* (1701); *University of Pennsylvania* (1740); *Princeton*

(1746); *Washington and Lee* (1749); *Columbia* (1754); *Brown* (1764); *Rutgers* (1766) and *Dartmouth* (1769).

After the Revolution of 1776, the state tax-supported university was established. The *University of Virginia* (1819) was a notable early example of this type.

Colleges for women grew up in the second quarter of the 19th century. Among these are: *Mt. Holyoke* (1837); *Elmira* (1855); *Vassar* (1861); *Wells* (1868); *Hunter* (1870); *Wellesley* (1870); *Smith* (1871) and *Bryn Mawr* (1880).

In the latter part of the 19th century, universities established by private endowments arose. Typical of these are: *Cornell* (1865), which is also a land-grant institution; *Johns Hopkins* (1876); *Stanford* (1885) and the *University of Chicago* (1891).

Libraries of the World

Europe and Asia

Among the great libraries of the world, the *British Museum* remains in the first rank. It contains more than 5,000,000 printed volumes and manuscripts (one bookstack containing some 200,000 volumes was destroyed during a German air raid in World War II).

One of the finest libraries in the world is the *Bibliothèque Nationale* in Paris, which has approximately 5,000,000 volumes, 130,000 manuscripts, 240,000 medals and coins, and 3,100,000 prints and engravings.

The *State Library* in Berlin, founded in 1659-61, was combined in 1947 with the library of the Technische Hochschule to form a new institution known as the *Oeffentliche Wissenschaftliche Bibliothek*. Prior to World War II, the State Library had 2,850,000 volumes, 68,500 manuscripts and 300,000 maps. The *State Library* at Munich suffered perhaps the greatest of all war losses, with some 500,000 volumes destroyed; it now contains about 1,000,000. The *Deutsche Bücher* at Leipzig had recovered most of its 2,000,000 volumes by 1948. Estimates have placed the war losses of all German libraries at between 20 and 25 million volumes.

The *Nationalbibliothek* in Vienna has about 1,000,000 volumes and a large collection of papyri.

While not as large as some of the European state libraries, the *Biblioteca Apostolica Vaticana* in Rome has many priceless old manuscripts bequeathed to the Vatican over the centuries. The printed books number about 700,000, the incunabula about 6,000 and the manuscripts about 50,000.

Three of the more important Italian libraries are the *Biblioteca Nazionale* in

Naples, with about 1,350,000 volumes and 11,000 manuscripts; the *Biblioteca Nazionale Centrale* in Florence, with 3,400,000 volumes, manuscripts and pamphlets, and the *Biblioteca Nazionale Centrale* in Rome, with approximately 1,500,000 volumes.

Other large European libraries are the *Bibliothèque Royale* in Brussels (2,000,000 volumes), the *Biblioteca Nacional* in Madrid (1,500,000), the *University Library* at Amsterdam (more than 1,500,000) and the *Royal Library* in Stockholm (650,000). The *Lenin State Library* in Moscow is said to contain 10,000,000 volumes—largest single collection in the world—besides many collections of valuable historical documents. In Leningrad, the *Saltykov-Shchedrin Public Library* claims 6,000,000 volumes and the *Library of the Academy of Sciences* more than 4,000,000.

In the Far East, the most extensive libraries are found in Japan, although war damage in 1944-45 was severe. In Tokyo, the *Imperial University Library* has slightly more than 1,000,000 volumes, the *Imperial Cabinet Library* 500,000, and the *Waseda University Library* 400,000. The *Imperial University Library* at Kyoto contains about 1,100,000.

The United States and Canada

The earliest libraries in the Colonial era were privately owned, although in 1731 Benjamin Franklin projected the first subscription library in Philadelphia. Endowments helped to set up many of the large libraries, although many of these institutions are now receiving state or municipal support.

The largest library in the United States is the *Library of Congress*, established in 1800 by an act of Congress. In 1948, it contained 8,387,385 books. It extends its services to members of Congress and other gov-

ment departments, and also offers excellent facilities for persons engaged in scholarly research.

The *New York Public Library*, with its 3,000,000 volumes, is the largest public library in the United States.

More than 6,000 U. S. public libraries reporting statistics for 1944-45 contained 24,675,000 volumes and circulated approximately 335,000,000 books to 23,000,000 registered borrowers.

The growth of libraries attached to colleges and universities in the United States has been phenomenal, and some of the university libraries are among the largest in the country. Among them are (total

volumes in parentheses): Harvard (4,965,000); Yale (3,643,000); University of California, including branches (2,246,000); University of Illinois (2,457,000); Columbia (1,806,000); University of Chicago (1,750,000); University of Minnesota (1,415,000); Cornell (1,300,000); University of Michigan (1,300,000); University of Pennsylvania (1,123,000); Princeton (1,150,000); and Stanford (1,046,000).

In Canada, the most important public library is that of Toronto, which has more than 700,000 volumes. Extensive libraries attached to the universities are at Queens (219,000), McGill (461,000), and Laval (920,000).

Museums of the World

(For U. S. museums see INDEX.)

The modern museum originated during the Renaissance, when the revival of interest in the arts and classical antiquity led princes, nobles and humanists to amass specimens of historical value and to house their collections in special buildings or galleries.

Art Museums

The *British Museum*, London, has two principal divisions—the Library and the Departments of Antiquities. Its library is one of the largest in the world, and contains such outstanding treasures as the Codex Alexandrianus of the Greek Bible, the best collection of Greek papyrus from Egypt, and vast collections of original historical manuscripts of incalculable value. In the Departments of Antiquities are some of the most famous historical objects of the world, including the Elgin Marbles and the Rosetta Stone.

Victoria and Albert Museum, London, whose primary object is to furnish examples to illustrate the history of art, emphasizes architecture and sculpture, ceramics, engraving, book production, paintings, textiles, etc. The library is devoted principally to fine and applied arts.

National Gallery, London, contains a great number of old Masters, including paintings by Da Vinci, Michelangelo, Botticelli, Mantegna, Titian, Bellini, Jan van Eyck, Rubens, Rembrandt, Holbein, Constable and Turner.

Tate Gallery, London, established as part of the National Gallery, was badly damaged during air raids of World War II, and had only a few of its rooms open in 1948.

Wallace Collection, London, bequeathed to the government in 1897 by the widow Sir Richard Wallace, contains many *objets d'art* and curios of French origin, and first-rank canvases and etchings of Italian, Spanish, Flemish, Dutch and English artists.

In France, the most famous gallery is the *Louvre* in Paris, noted for the magnificence of its architecture as well as for its art collection, which is the largest in the world. Other Parisian museums of importance are *Cluny*, *Luxembourg*, *Rodin*, *Guimet*, and *Carnavalet*.

Among the magnificent Italian museums, the *National Museum* at Naples contains one of the best arranged and classified collections. The *Uffizi Gallery* in Florence, founded by the Medicis, has one of the world's largest and best collections of Italian art. Other galleries in Florence are the *Pitti Palace*, the *Picture Gallery*, the *Academy of Fine Arts* and the *National Museum*. Rome has numerous museums, including several in the Vatican.

In Berlin, the *Kaiser Friedrich Museum*, the *Old and New Museums* and the *Schloss Museum* in Berlin, were all damaged during World War II.

The *Royal Museum of Fine Arts* in Brussels has a fine collection of French, Flemish and Dutch masters and houses many canvases by Rubens, Van Dyck, Jordaens, Rembrandt, Frans Hals and Jan Steen.

The *State Museum* in Amsterdam contains superb works by Rembrandt, Vermeer and others.

Among the notable art museums in other countries are the world-famous *Museo del Prado* in Madrid; the *Tretyakov State Gallery*, the *Pushkin State Museum of Fine Arts* and the *Hermitage State Museum* in Moscow; and the *Tokyo Imperial Household Museum*, famed for its many Oriental paintings and examples of Oriental workmanship in lacquer, jade, ivory and metal.

Science Museums

The *Ashmolean Museum*, oldest in Great Britain, was built in 1679 by the University of Oxford and houses a collection of archeological rarities.

Science Museum of London has exhibits of scientific instruments and appliances which review the progress of science and the history of invention. Other London museums of science are the *Natural History Museum*, the *Imperial War Museum* (exhibits of both World Wars) and the *Museum of Practical Geology*.

The *Liverpool Museums* contain valuable collections of natural history and antiquities and are divided into departments of zoology, botany, geology, archeology and ethnology.

The *Manchester Museum* serves as both a municipal and a university museum. The *Bristol Museum* contains departments of geology, zoology, botany, archeology and Bristol antiquities. The *Natural History Museum* in Hull is but one of the many museums in that city. The *National Museum of Wales* at Cardiff has departments of archeology, botany, geology and zoology.

In Edinburgh, Scotland, are the famed *Royal Scottish Museum*, which has collections in art, ethnography, natural history, technology and geology; and the *National Museum of Antiquities of Scotland*, noted for its coin and manuscript collections. In Glasgow is the *University of Glasgow Museum* with its *Zoological Museum*.

The *Science Museum* in Dublin and the one in Belfast have important science collections.

Notable institutions of continental Europe include the two natural history museums in Paris, the *Museum of Oceanography* in Monaco, the *Natural History Museum* in Lisbon, the *State Museum of Geology and Mineralogy* in Leyden (Netherlands), the *Museum of Natural History* in Stockholm, the *Natural History Museum* in Vienna, the *Hungarian National Museum* in Budapest, the *National Museum* in Prague, and the various natural science

museums in Berne, Geneva, Lausanne and Neuchâtel. Two of the best known museums in the U.S.S.R. are the *Museum of the Academy of Sciences* in Leningrad and the *State Polytechnical Museum* in Moscow.

Famous science museums in Germany prior to World War II included the various sections of the *Staatlichen Museen* in Berlin and the museums of natural history and ethnography in Hamburg.

In Calcutta is the *Indian Museum*, outstanding for its marine fauna and vertebrate fossils, and in Bombay the *Victoria and Albert Museum*.

In Australia are the *Queensland Museum*, Brisbane; the *Botanic Museum* also in Brisbane; the *South Australian Museum*, Adelaide, and the *Museum of Applied Science of Victoria* in Melbourne.

New Zealand contains the *Canterbury Museum*, Christchurch, rich in local fauna, flora and geological items, and a Maori and Polynesian ethnological collection. The *Otago Museum* of natural sciences and ethnology, the *Auckland Institute and Museum* in Auckland and the *Dominion Museum* in Wellington are others of note.

In Africa, the *South Africa Museum*, Capetown, holds general and local history collections and others illustrating anthropology, ethnology and archeology. The *Durban Museum* contains much anthropological material. In Cairo are the notable collections of the *Egyptian Museum*.

Other museums of note include the *Museum of Antiquities* at Istanbul, the *American University Museum* in Beirut (Lebanon), the museum attached to the *Imperial University* at Tokyo, the *Zi-Ka-Wei Museum* near Shanghai, the *National Museum of Natural History* in Santiago (Chile), the *Bahia State Museum* in Brazil, and the *Argentine National Museum of Natural Sciences* at Buenos Aires.

Zoological Gardens of the World

Far from being a modern idea, the custom of keeping savage beasts in captivity is as ancient as recorded history. In the early part of the 12th century, B.C., the Chinese king Wen had a special zoo where he housed animals captured from all parts of ancient China.

One of the earliest modern zoos, the *Jardin des Plantes* in Paris, was established in 1793. In the following century zoological gardens were established in many of the major cities of the world.

At Giza, outside Cairo, the zoological garden is lodged in a beautiful park maintained by the Egyptian government. Its large collection of animals is chiefly African in origin. Elsewhere in Africa, at Khartoum in the Sudan, at Pretoria (largest on the

continent) and at Johannesburg, fine specimens are found in state-supported zoological gardens.

North America has more than 30 major zoos, in the United States, Canada and Mexico. The *Quebec Zoological Society's* collection is made up of Canadian species; Toronto has in addition many exotic species.

The first zoological garden in the United States was established in Philadelphia in 1874. Since that time nearly every large city in the country has acquired a zoo. Among the largest are the celebrated *Bronx Zoo* and the *Central Park Zoo* in New York, the *Lincoln Park Zoo* and the *Brookfield Zoo* in Chicago, and those in St. Louis, Detroit, Kansas City and San

meigo. The *United States National Zoological Park* in Washington, D.C., in a beautiful setting of hills, woods and streams, was established in 1890 by an act of Congress. Some of the U.S. zoos exhibit their collections in open-air, barless pits; the Brookfield Zoo is an example.

Extensive collections in South America are found at Buenos Aires, and at Concepción and Santiago in Chile. At Belém, Brazil, a zoological-botanical garden is noteworthy for its specimens of Amazonian birds and animals.

In Asia, important collections were established by the governments and by native princes. Largest in India is the zoo at Alipore, Calcutta; other excellent zoos are located at Bombay, Karachi and on private estates. Singapore, Batavia and Surabaya have important collections. Others are found at Fort de Kock on Sumatra's west coast; and at Johore Bahru in Malaya. Japan abounds in large and small zoos and privately owned aviaries, located in Tokyo, Nagoya, Kyoto, Osaka and Kobe; many of these were severely damaged during World War II.

Sydney, Melbourne, Adelaide and Perth have large zoological gardens; smaller zoos in Australia are found at Brisbane and Wellington. The Auckland, New Zealand, collection has a representative group of native fauna.

In Europe, zoological gardens have long been popular public institutions. The *Jardin d'Acclimatation*, in the Bois de Boulogne, Paris, was established in 1858, and a model zoo at Vincennes was added in 1937 for the Paris Exposition.

Germany had about 20 zoological gardens, many of which were developed in the peacetime years between World Wars I and II. Large zoos were located in Berlin

and Frankfurt on Main. In Munich, the animals were grouped according to the continent of their origin. Others were established at Dresden, Leipzig and Cologne. At Stellingen, the *Hagenbeck Garden* became an outstanding show place and distributing center for animals. Smaller collections were established at Düsseldorf, Elberfeld and Hanover. Several German zoos, notably that at Berlin, were destroyed during World War II.

The *Schönbrunn* at Vienna is one of the oldest zoos in Europe. The Budapest zoological gardens house a fine collection of European birds. At Antwerp, the *Royal Zoological Society* founded a large menagerie in 1843. It was seriously damaged by German bombs during World War II.

In the British Isles, the outstanding collection is in the garden of the *London Zoological Society* in Regent's Park. Although this zoo received a number of direct bomb hits in 1940-41 and again in 1944, it remained open throughout World War II; visitors during this period numbered 6,500,000. Manchester and Clifton have smaller gardens, and the one at Edinburgh is famous for its collection of penguins. The *Dublin Zoo* is noted for its lions, many of which were born there.

The Amsterdam zoo, with its East Indian collection and its aquarium, and the Rotterdam gardens are the two best known in the Netherlands. Built on a high elevation, the *Skansen Zoo* in Stockholm exhibits north European specimens. The most important gardens in the U.S.S.R. are found in Moscow, where northern as well as exotic species are collected. The zoo at Rome has part of its collection confined in barless pits. At Lisbon there is a small zoological garden, and in Madrid a part of the original royal menagerie.

Famous Structures

(See also Seven Wonders of the World.)

Ancient

The *Great Sphinx of Egypt*, one of the wonders of ancient Egyptian architecture, joins the pyramids of Giza and has a length of 189 ft. It was built in the 4th century B.C. and was used as a temple.

Other Egyptian buildings of note include the *Temples of Karnak and Edfu* and the *Pyramids at Beni Hassan*.

The *Parthenon of Greece*, built on the Acropolis in Athens, was the chief temple to the goddess Athena. It was believed to have been completed by 438 B.C. The present temple remained intact until the 15th century A.D. Today, though the Parthenon is in ruins, its majestic proportions are still discernible.

Other great structures of ancient Greece are the *Temples at Paestum* (about 540

and 420 B.C.); the *Temple of Poseidon* (about 460 B.C.); the *Temple of Apollo at Corinth* (about 540 B.C.); the *Temple of Apollo at Bassae* (about 450-420 B.C.); the famous *Erechtheum* atop the Acropolis (about 421-405 B.C.); the *Temple of Athena Nike* at Athens (about 426 B.C.); the *Olympieum* at Athens (174 B.C.-A.D. 131); the *Athenian Treasury* at Delphi (about 515 B.C.); the *Propylaea* of the Acropolis at Athens (437-432 B.C.); the *Theater of Dionysus* at Athens (about 350-325 B.C.); the "*House of Cleopatra*" at Delos (138 B.C.) and the *Theater* at Epidaurus (about 325 B.C.).

The *Colosseum (Flavian Amphitheater)* of Rome, the largest and most famous of the Roman amphitheaters, was opened for use A.D. 80. Elliptical in shape, it consisted of three stories and an upper gallery,

rebuilt in stone in its present form in the third century A.D. Its seats rise in tiers, which in turn are buttressed by concrete vaults and stone piers. It could seat between 40,000 and 50,000 spectators. The Colosseum was principally used for gladiatorial combat.

The Pantheon at Rome, begun by Agrippa in 27 B.C. as a temple, was rebuilt in its present circular form by Hadrian (A.D. 110-25). Literally the Pantheon was intended as a temple of "all the gods." It is remarkable for its perfect preservation today, and it has served continuously for 20 centuries as a place of worship.

Famous Roman arches include the *Arch of Constantine* (about A.D. 315) and the *Arch of Titus* (about A.D. 80).

European

St. Mark's Cathedral in Venice (1063-67), one of the great examples of Byzantine architecture, was begun in the 9th century. Partly destroyed by fire in 976, it was later rebuilt as a Byzantine edifice.

Other famous Byzantine examples of architecture are *St. Sophia* in Constantinople (A.D. 532-37); *San Vitale* in Ravenna (542); *St. Paul's Outside the Walls*, Rome (5th century); the *Kremlin* baptism and marriage church, Moscow (begun in 1397); and *St. Lorenzo Outside the Walls*, Rome, begun in 588.

The Cathedral Group at Pisa (1067-1173), one of the most celebrated groups of structures built in Romanesque style, consists of the cathedral, the cathedral's baptistery, and the *Leaning Tower*. This trio forms a group by itself in the northwest corner of the city. The cathedral and baptistery are built in black and white marble. The campanile (*Leaning Tower*) is 179 ft. high and leans more than 16 feet out of the perpendicular. There is little reason to believe that the architects intended to have the tower lean.

Other examples of Romanesque architecture include the *Vézelay Abbey* in France (1130); the *Church of Notre Dame-du-Port* at Clermont-Ferrand in France (1100); the *Church of San Zeno* (begun in 1138) at Verona, and *Durham Cathedral* in England.

The Alhambra (1248-1354), located in Granada, Spain, is universally esteemed as one of the great masterpieces of Mohammedan architecture. Designed as a palace and fortress for the Moorish monarchs of Granada, it is surrounded by a heavily fortified wall more than a mile in perimeter. The location of the Alhambra in the Sierra Nevada provides a magnificent setting for this jewel of Moorish Spain.

Notre Dame de Paris (begun in 1163), one of the great examples of Gothic architecture, is a twin-towered church with a steeple over the crossing and immense fly-

ing buttresses supporting the masonry at the rear of the church.

Other famed Gothic structures are *Westminster Abbey*, London (begun 1245; damaged in World War II); *Chartres Cathedral* (12th century); *Sainte Chapelle*, Paris (1246-48); *Laon Cathedral*, France (1160-1205); *Rheims Cathedral* (about 1210-50; rebuilt after its almost complete destruction in World War I); *Rouen Cathedral* (13th-16th centuries); *Amiens Cathedral* (1218-69); *Beauvais Cathedral* (begun 1247); *Salisbury Cathedral* (1220-60); *York Minster* or the *Cathedral of St. Peter* (begun in the 7th century); *Milan Cathedral* (begun 1386); and *Cologne Cathedral* (13th-19th centuries; badly damaged in World War II).

The Duomo (cathedral) in Florence was founded in 1298, completed by Brunelleschi and consecrated in 1436. The oval-shaped dome dominates the entire structure.

Other examples of Renaissance architecture are the *Palazzo Vecchio*, the *Palazzo Pitti* and the *Palazzo Strozzi* in Florence; *St. Peter's* in Rome (begun in 1506 and consecrated in 1626); the *Farnese Palace* in Rome; *Palazzo Grimani* (completed about 1550) in Venice; the *Escorial* (1563-93) near Madrid; the *Town Hall of Seville* (1527-32); the *Louvre*, Paris; the *Château at Blois*, France; *St. Paul's Cathedral*, London (1675-1710; badly damaged in World War II); the *École Militaire*, Paris (1752); the *Pazzi Chapel*, Florence, designed by Brunelleschi (1429); the *Palaces of Versailles* and of *Fontainebleau* and the *Château de Chambord* in France.

Outstanding European buildings of the 18th and 19th centuries are the *Superga* at Turin, the *Hôtel-Dieu* in Lyon, the *Belvedere Palace* at Vienna, the *Royal Palace* of Stockholm, the *Opera House* of Paris (1863-75); the *Bank of England*, the *British Museum*, the *University of London* and the *Houses of Parliament*, all in London; the *Panthéon*, the *Church of the Madeleine*, the *Bourse* and the *Palais de Justice* in Paris.

Asiatic

The Taj Mahal (1632-50), at Agra, India, built by Shah Jahan as a tomb for his wife, is considered by some as the most perfect example of the Mogul style and by others as the most beautiful building in the world. Four slim white minarets flank the building, which is topped by a white dome; the entire structure is of marble.

Other examples of Indian architecture are the temples at Benares and Tanjore.

Famed Mohammedan edifices are the *Dome of the Rock* or *Mosque of Omar*, Jerusalem (A.D. 691); the *Citadel* (1166), and the *Tombs of the Mamelukes* (15th century), in Cairo; the *Tomb of Humayun* in Delhi; the *Blue Mosque* (1468) at Tabriz

and the *Tamerlane Mausoleum* at Samarkand.

Angkor Vat, outside the city of Angkor Thom, Cambodia, is one of the most beautiful examples of Cambodian or Khmer architecture. The sanctuary was built during the 12th century. Its temple courts are protected by a broad moat.

Great Wall of China (228 B.C.?), designed specifically as a defense against nomadic tribes, has numerous large watch towers which could be called buildings. It was erected by Emperor Ch'in Shih Huang Ti and is 1,400 miles long. Built mainly of earth and stone, it varies in height between 18 and 30 feet.

Typical of Chinese architecture are the pagodas or temple towers. Among some of the better known pagodas are the *Great Pagoda of the Wild Geese* at Sian (founded in 652); *Nan t'a* (11th century) at Fang Shan; the *Pagoda of Sung Yueh Ssu* (A.D. 23) at Sung Shan, Honan.

Other well-known Chinese buildings are the *Drum Tower* (1273), the *Three Great Halls* in the Purple Forbidden City (1627), the *Buddha's Perfume Tower* (19th century), the *Porcelain Pagoda* and the *Summer Palace*, all at Peiping.

United States

Rockefeller Center, New York City, completed in 1940, is a remarkable group of examples of American skyscraper architecture. It is dominated by the 70-story R. C. A. building in the center.

Empire State Building, New York City, the loftiest building in the world, has 102 stories and is 1,250 feet high.

Other famous examples of modern buildings in the United States are the *Chrysler Building* and the *Woolworth Building* in New York City; the *Merchandise Mart*, the *Board of Trade Building* and *Civic Opera Building* in Chicago; and the *Pentagon* in Washington.

Great Dams of the World

Reservoir capacity, thousands of acre feet	Name	Location	Maximum height, feet	Date completed
31,142	Hoover	Colorado River, Ariz.-Nev.	726	1936
24,500	Garrison	Missouri River, N.Dak.	210	*
19,412	Fort Peck	Missouri River, Mont.	250	1940
9,517	Grand Coulee	Columbia River, Wash.	550	1942
6,200	Fort Randall	Missouri River, S.Dak.	150	*
6,100	Kentucky	Tennessee River, Ky.	160	1944
6,089	Wolf Creek	Cumberland River, Ky.	242	*
5,825	Denison	Red River, Okla.-Tex.	165	1944
4,500	Shasta	Sacramento River, Calif.	602	1945
4,407	Gatun	Chagres River, Panama Canal Zone	115	1912
4,060	Aswan	Nile River, Egypt	174	1934
3,500	Hungry Horse	Flathead, S.Fk., Mont.	520	*
3,263	Lázaro Cárdenas (El Palmito)	Nazas River, Mex.	295	1948
3,000	Salt Springs	North Fork, Mokelumne River, Calif.	345	1931
2,567	Norris	Clinch River, Tenn.	265	1936
2,432	Alvaro Obregón (Oviachic)	Yaqui River, Sonora, Mex.	187	*
2,300	Saluda	Saluda River, S. C.	208	1930
2,219	Elephant Butte	Rio Grande, N. Mex.	301	1916
2,150	Mettur	Cauvery River, India	214	1934
2,092	Center Hill	Caney Fork River, Tenn.	240	*
2,000	Hume	Murray River, Australia	180	1936
2,000	Kingsley	North Platte River, Nebr.	162	1941
1,997	Osage (Bagnell)	Osage River, Mo.	148	1931
1,983	Norfolk	North Fork River, Ark.	230	1944
1,980	Chelsea	Gatineau River, Canada	100	1927
1,975	Pensacola	Grand River, Okla.	152	1940
1,934	Marshall Ford (Mansfield)	Colorado River, Tex.	270	1941
1,820	Davis	Colorado River, Ariz.-Nev.	200	*
1,706	Dale Hollow	Obey River, Tenn.-Ky.	183	1943
1,704	American Falls	Snake River, Idaho-Wyo.	92	1927
1,702	El Azucar	San Juan River, Mexico	142	1943
1,565	Cherokee	Holston River, Tenn.	212	1942
1,560	Sardis	Little Tallahatchie River, Miss.	117	1940
1,540	Douglas	French Broad River, Tenn.	160	1943
1,450	Fontana	Little Tennessee River, N.C.	470	1944
1,400	Roosevelt	Salt River, Ariz.	280	1911

*Under construction in 1948.

Notable Modern Bridges

Length of channel span, feet	Name	Location	Type*	Year completed
4,200	GOLDEN GATE	San Francisco	S	1937
3,500	GEORGE WASHINGTON	New York City	S	1931
2,310	TRANSBAY	San Francisco	S	1936
2,300	BRONX-WHITESTONE	New York City	S	1939
1,850	AMBASSADOR	Detroit, Mich.	S	1929
1,800	QUEBEC	Near Quebec, Canada	C	1917
1,750	DELAWARE RIVER	Philadelphia, Pa.	S	1926
1,700	FORTH	Firth of Forth, Scotland	C	1889
1,652	KILL VAN KULL	Bayonne, N. J.	SA	1931
1,650	SYDNEY HARBOR	Sydney, Australia	SA	1932
1,632	BEAR MOUNTAIN	Peekskill, N. Y.	S	1924
1,600	WILLIAMSBURG	New York City	S	1903
1,595.5	BROOKLYN	New York City	S	1883
1,550	LIONS GATE	Vancouver, Canada	S	1939
1,500	MID-HUDSON	Poughkeepsie, N. Y.	S	1930
1,500	HOWRAH	Calcutta, India	C	1943
1,470	MANHATTAN	New York City	S	1909
1,400	TRANSBAY	Oakland, Calif.	C	1936
1,380	TRIBOROUGH	New York City	S	1936
1,207	ST. JOHNS	Portland, Oreg.	S	1931
1,200	LONGVIEW	Longview, Wash.	C	1930
1,200	MT. HOPE	Near Bristol, R. I.	S	1929
1,182	QUEENSBORO	New York City	C	1909
1,114	FLORIANOPOLIS	Florianopolis, Brazil	S	1926
1,100	CARQUINEZ STRAIT	Near San Francisco	C	1927
1,097	MONTREAL HARBOUR	Montreal, Canada	C	1930
1,080	BIRCHENOUGH	Southern Rhodesia	SA	1935
1,080	DEER ISLE	Deer Isle, Me.	S	1939
1,057	CINCINNATI	Cincinnati, Ohio	S	1867
1,050	OTTO BEIT	Southern Rhodesia	S	1939
1,050	COOPER RIVER	Charleston, S. C.	C	1929
1,010	WHEELING	Wheeling, W. Va.	S	1849
977.5	HELL GATE	New York City	SA	1917
950	RAINBOW	Niagara Falls, N. Y.	SA	1941
949	GRAND MERE	Quebec, Canada	S	1928
930	PEACE RIVER	Alaska Highway	S	1943
924	STORY	Queensland, Australia	C	1940
875	NATCHEZ	Natchez, Miss.	C	1940
871	BLUE WATER	Port Huron, Mich.	C	1938
790	HUEY P. LONG	Near New Orleans, La.	C	1935

*C—Cantilever.

S—Suspension.

SA—Steel Arch.

America's Tallest Buildings

City	Building	No. of stories	Height, feet	City	Building	No. of stories	Height, feet
New York	Empire State	102	1,250	New York	10 E. 40th St.	48	621
New York	Chrysler	77	1,046	New York	New York Life	40	617
New York	60 Wall Tower	68	950	New York	Singer	47	612
New York	Bk. of Manhattan	71	925	Chicago	Board of Trade	44	605
New York	R. C. A.	70	850	New York	U. S. Court House	37	590
New York	Woolworth	60	792	Pittsburgh	Gulf	44	582
New York	City Bank	54	745	New York	Municipal	40	580
Cleveland	Terminal Tower	52	708	Cincinnati	Carew Tower	48	574
New York	500 Fifth Avenue	60	700	New York	Continental Bank	48	565
New York	Metropolitan Life	50	700	New York	Sherry-Netherland	40	560
New York	Chanin	56	680	New York	N. Y. Central	35	560
New York	Lincoln	53	673	Chicago	Pittsfield	39	557
New York	Irving Trust	50	654	Columbus	Lincoln-LeVeque Tower	46	556
New York	General Electric	50	641	Chicago	Continental	42	555
New York	Waldorf-Astoria	47	625	Detroit	Penobscot	47	551

Great Disasters

Earthquakes and Volcanic Eruptions

- A.D. 79 Aug. 24, ITALY: eruption of Mt. Vesuvius buried cities of Pompeii and Herculaneum, killing thousands.
- 1755 Nov. 1, PORTUGAL: one of the most severe of recorded earthquakes leveled Lisbon and was felt as far away as southern France and North Africa; between 10,000 and 20,000 killed in Lisbon alone.
- 1883 Aug. 26-28, NETHERLANDS INDIES: eruption of Krakatoa; violent explosions destroyed two-thirds of island. Sea waves occurred as far away as Cape Horn, and possibly England. Estimated 36,000 dead.
- 1902 May. 8, MARTINIQUE, WEST INDIES: Mt. Pelée erupted and wiped out city of St. Pierre; total deaths estimated at 40,000.
- 1906 April 18, SAN FRANCISCO: earthquake accompanied by fire razed more than 4 sq. mi.; more than 500 dead or missing; property damage about 250-300 millions.
- 1923 Sept. 1, JAPAN: earthquake destroyed third of Tokyo and most of Yokohama; more than 90,000 killed.
- 1935 May 31, INDIA: earthquake at Quetta killed an estimated 50,000.
- 1939 Jan. 24, CHILE: earthquake razed some 50,000 sq. mi.; estimated 30,000 killed, mostly in Concepción and Chillan.
- 1939 Dec. 27, NORTHERN TURKEY: severe quakes in eastern and northern Anatolia destroyed city of Erzingan; about 100,000 casualties.
- 1947 Nov. 1, CHILE: earthquake east of Lima killed 100-200 persons.
- 1948 June 28, JAPAN: series of earthquakes followed by fire destroyed most of the industrial city of Fukui; death toll was estimated at more than 3,000.

Tornadoes, Typhoons and Hurricanes

WORLD

- 864 Oct. 5, INDIA: most of Calcutta denuded by cyclone; 70,000 killed.
- 876 Oct. 31, INDIA: cyclone and tidal wave swept 3,000 sq. mi. with Bengal worst hit; 215,000 killed.
- 882 June 6, INDIA: cyclone and tidal wave killed 100,000 in Bombay.
- 906 CHINA: typhoon at Hong Kong killed about 10,000.
- 930 Sept. 3, SANTO DOMINGO (now Ciudad Trujillo): hurricane killed about 2,000 and injured 6,000.
- 934 Sept. 21, JAPAN: hurricane killed more than 4,000 on Honshu.
- 935 Oct. 25, HAITI: hurricane and flood ravaged Jérémie and Jacmel districts; 2,000 killed.
- 942 Oct. 16, INDIA: cyclone devastated Bengal; about 40,000 lives lost.
- 948 Jan. 26, RÉUNION ISLAND: at least 300 persons killed in hurricane.
- 1925 March 18, MIDWEST: about 800 killed and 13,000 injured in tornado which hit Ill., Ind., Tenn., Ky., and Mo.; 15,000 homeless, 35 towns destroyed.
- 1926 Sept. 18, FLORIDA: hurricane which hit east coast took 373 lives, left 40,000 homeless and caused property damage of 165 million.
- 1928 Sept. 12, FLORIDA: hurricane from Windward Islands killed 4,000.
- 1936 April 2, MISSISSIPPI AND GEORGIA: Tupelo, Miss., and Gainesville, Ga., centers of tornadoes which swept the South, 402 killed; 1,853 injured.
- 1938 Sept. 21, NEW ENGLAND: hurricane killed at least 488 in severest recorded storm of northeastern states.
- 1947 April 9, TEXAS AND OKLAHOMA: tornado killed approximately 150 and injured 1,500.
- 1947 Sept. 17-19, FLORIDA AND GULF COAST: hurricane swept through Fla., La., and Miss.; almost 100 dead.
- 1948 March 20-27, MIDWEST AND SOUTH: approximately 80 persons killed in tornadoes which passed through several states from Texas to New York; most casualties were in Illinois.
- 1948 May 1-3, MIDWEST AND SOUTH: tornadoes in Tex., Okla., Kans., Mo., Ky. and W. Va. killed at least 23.

UNITED STATES

- 884 Feb. 18, SOUTHERN STATES: tornadoes took about 700 lives.
- 886 Oct. 12, TEXAS: violent gales caused flood resulting in 250 deaths.
- 893 Aug. 27, SOUTHEAST COAST: 900 killed.
- 900 Sept. 8, TEXAS: Galveston struck by hurricane and tidal wave; 5,000 dead.

Floods and Tidal Waves

WORLD

- 228 HOLLAND: 100,000 reputedly drowned by sea flood in Friesland section.
- 1642 CHINA: rebels besieging Kaifeng destroyed seawall, causing flood that drowned 300,000 inhabitants.

- 1887 CHINA: hundreds of thousands of lives reputedly lost in Honan province in overflow of Hwang Ho River.
- 1896 JAPAN: tidal wave following an earthquake at Sanriku killed estimated 27,000.
- 1939 CHINA: floods in north; casualties estimated at ten million homeless, starved or drowned.
- 1946 ALASKA-HAWAII: series of tidal waves in Pacific originating off Alaska killed about 150 in Hawaii.
- 1947 JAPAN: floods in wake of typhoon killed about 2,000 on Honshu island.
- 1947 PAKISTAN: floodwaters in East Bengal left 1,000,000 homeless and led to famines which took thousands of lives.
- 1948 TURKEY: hundreds of persons were drowned when two rivers in southern Turkey burst their dikes.
- 1948 CHINA: about 1,000 reported dead and 300,000 homeless in floods near Foochow.
- UNITED STATES
- 1889 PENNSYLVANIA: More than 2,000 died in Johnstown flood.
- 1912 MISSISSIPPI VALLEY: Mississippi River and tributaries overflowed. Property loss, 45 million. 200 killed.
- 1913 OHIO AND INDIANA: floods of Ohio and Indiana rivers took 730 lives and caused 180 million property damage.
- 1927 MISSISSIPPI VALLEY: floods inundated 20,000 sq. mi.; 700,000 homeless.
- 1937 MISSISSIPPI AND TRIBUTARY VALLEYS: floods in the Allegheny, Mississippi and Ohio valleys caused several hundred deaths.
- 1947 MISSISSIPPI RIVER: floods reached highest crest in 104 years—40.2 feet. Damage of 12 million dollars, few lives lost in St. Louis area.
- 1948 OREGON AND WASHINGTON: floods of Columbia and Willamette Rivers raged for approximately two weeks, destroying Vanport City, Oreg., and inundating Portland; approximately 50 dead or missing.

Fires and Explosions

WORLD

- 1666 Sept. 2, ENGLAND: "Great Fire of London" destroyed 13,200 houses, St. Paul's Church, 86 parish churches, etc. Damage 10 million pounds.
- 1812 Sept. 14, RUSSIA: fire started by Russians in Moscow after French occupation; destroyed 30,800 houses.
- 1881 Dec. 8, AUSTRIA: about 850 died in Ring Theater fire in Vienna.
- 1917 Dec. 6, CANADA: approximately 1,500 killed in explosion and fire at Halifax, N.S., when ammunition ship collided with another vessel.
- 1922 ASIA MINOR: more than three-fifths of Smyrna destroyed by fire following Turkish occupation.
- 1947 Aug. 15, ENGLAND: blast in underseas coal mine near Whitehaven, Cumberland, killed 104 miners.
- 1947 Aug. 18, SPAIN: explosion at naval torpedo and mine factory in Cádiz killed from 300 to 500 persons and demolished shipyards, factories, etc.
- 1948 Feb. 10, NEWFOUNDLAND: fire in home for aged at St. John's killed 34 persons.
- 1948 July 28, GERMANY: hundreds killed and more than 6,000 injured in explosion which wrecked I. G. Farben chemical works in Ludwigshafen.

UNITED STATES

- 1835 Dec. 16, NEW YORK CITY: 530 buildings destroyed by fire which spread over 52 acres; 15 million damage.
- 1871 Oct. 8, CHICAGO: the "Chicago Fire," which started in barn, swept 2,124 acres, burned 17,450 buildings, killed 250 persons, and made 98,500 homeless; 196 million damage.
- 1872 Nov. 9, BOSTON: fire leveled 67 acres, destroyed almost 800 buildings; 75 million damage.
- 1904 Feb. 7, BALTIMORE, Md.: fire destroyed most of business section; 125 million damage.
- 1937 March 18, NEW LONDON, TEXAS: natural gas explosion destroyed schoolhouse; 413 children and 14 teachers killed.
- 1942 Nov. 28, BOSTON: Coconut Grove night club fire killed approximately 500.
- 1944 July 17, PORT CHICAGO, CALIF.: More than 300 killed in explosion of two ammunition ships.
- 1946 Dec. 7, ATLANTA: Fire in Winecoff Hotel killed 119.
- 1947 March 25, CENTRALIA, ILL.: Explosion in coal mine killed 111 miners.
- 1947 April 16-18, TEXAS CITY, TEXAS: Most of city destroyed, more than 500 dead following explosion of French vessel *Grandcamp*.

Shipwrecks (not including military or naval action)

WORLD

- 1833 May 11, LADY OF THE LAKE: bound from England to Quebec, struck iceberg; 215 perished.

- 1853 Sept. 29, ANNIE JANE: emigrant vessel off coast of Scotland; 348 passengers and crewmen died.
- 1912 March 5, PRINCIPE DE ASTURIAS: Span-

- ish steamer struck rock off Sebastien Pt.; 500 drowned.
- 1912 April 15, **TITANIC**: sank after colliding with iceberg; 1,513 died.
- 1914 May 29, **EMPRESS OF IRELAND**: sank after collision in St. Lawrence River; 1,024 perished.
- 1928 Nov. 12, **VESTRIS**: British steamer sank in gale off Virginia; 110 died.
- 1931 June 14, French excursion steamer overturned in gale off St. Nazaire; approximately 450 died.
- 1939 June 1, Submarine **THETIS**: sank in Liverpool Bay, Eng.; 99 perished.
- 1942 Oct. 2, **QUEEN MARY**: rammed and sank a British cruiser, 338 aboard the cruiser died.
- 1947 Jan. 19, **HIMARA**: Greek ship struck floating mine near Gulf of Petalia; approximately 400 killed or drowned.
- 1947 July 17, **RAMDAS**: coastal steamer sank off Bombay, India; death toll estimated at more than 600.
- 1948 Jan. 19, **CAUTIN**: steamship sank in Imperial River, Chile; 150 believed drowned.
- 1948 Jan. 28, **JOO MARU**: Japanese freighter struck a floating mine near Okayama; 250 lost.
- 1948 June 11, **KJOEBENHAVN**: Danish passenger ship sank after striking mine in Kattegat; more than 150 lost.
- U. S. AND U. S. LINES**
- 1865 April 27, **SULTANA**: boiler explosion on Mississippi River steamboat near Memphis; 1,450 killed.
- 1904 June 15, **GENERAL SLOCUM**: excursion steamer burned in New York Harbor; 1,021 perished.
- 1915 July 24, **EASTLAND**: Great Lakes excursion steamer overturned in Chicago River; 812 died.
- 1934 Sept. 8, **MORRO CASTLE**: about 130 killed in fire off Asbury Park, N. J.
- 1939 May 23, Submarine **SQUALUS**: sank with 59 men off Hampton Beach, N. H.; 33 of the crew were rescued.
- 1943 June 6, ammunition ship collided with tanker off Norfolk; 84 died.
- 1945 April 9, U. S. ship, loaded with aerial bombs, exploded at Bari, Italy; at least 360 killed.
- 1947 Nov. 24-25, **CLARKSDALE VICTORY**: U. S. Army transport wrecked off British Columbia, Canada; 49 presumed dead.

Aircraft Accidents

- WORLD**
- 1921 Aug. 24, **ENGLAND**: **ZR-2**, British dirigible, broke in two on trial trip near Hull; 62 died.
- 1930 Oct. 5, **FRANCE**: British dirigible, **R-101**, crashed at Beauvais; 47 died.
- 1935 May 18, **U.S.S.R.**: stunt flier crashed into giant land plane, the *Maxim Gorky*; 49 killed.
- 1938 July 24, **COLOMBIA**: military plane crashed into grandstand during air review at Bogotá, killing 53.
- 1946 Sept. 18, **NEWFOUNDLAND**: Belgian airliner crashed near Gander; 26 killed.
- 1947 Jan. 26, **COPENHAGEN**: Royal Dutch airliner crashed at Copenhagen airport; 22 killed, including Grace Moore and Swedish Prince Gustavus Adolphus.
- 1947 Feb. 15, **COLOMBIA**: Avianca airliner crashed near Bogotá; 53 killed.
- 1947 Aug. 28, **NORWAY**: Norwegian Airlines transport crashed near Loedingen, Lofoten Island; 35 killed.
- 1947 Oct. 16, near **CARTAGENA, SPAIN**: chartered French airliner crashed into Mediterranean; 42 missing.
- 1947 Oct. 26, **GREECE**: Swedish airliner crashed on Mt. Hymettus, killing 45.
- 1948 Jan. 30, near **BERMUDA**: British airliner disappeared in Atlantic with 32 aboard, including Air Marshal Sir Arthur Coningham.
- 1948 July 4, **ENGLAND**: Swedish airliner and RAF transport collided near London while preparing to land at Northolt airport; 32 aboard airliner and 7 aboard transport were killed.
- 1948 July 16, near **HONG KONG**: flying boat crashed between Macao and Hong Kong; 25 killed.
- 1948 July 24, **GASPÉ PENINSULA, CANADA**: crash of chartered plane killed 29.
- 1948 Aug. 1, **ATLANTIC OCEAN**: French flying boat with 52 aboard disappeared en route between Martinique and French West Africa.
- U. S. AND U. S. LINES**
- 1925 Sept. 3, **CALDWELL, OHIO**: U. S. dirigible *Shenandoah* broke apart, killing 14.
- 1933 April 4, **NEW JERSEY COAST**: U. S. dirigible *Akron* crashed into sea; 73 died.
- 1937 May 6, **LAKEHURST, N. J.**: German zeppelin *Hindenburg* destroyed by fire at tower mooring; 36 aboard died.
- 1940 Aug. 31, **LOVETTSVILLE, VA.**: airliner crashed; 25, including Sen. Lundeen (Minn.), died.
- 1943 July 28, near **BOWLING GREEN, KY.**: airliner crash killed 20.
- 1944 July 27, **SCOTTISH COAST**: U. S. hospital transport crashed; 22 died.

- 1946 Oct. 3, NEWFOUNDLAND: U. S. transatlantic airliner crashed near Stephenville; all 39 aboard killed.
- 1947 May 29, NEW YORK CITY: airliner crashed attempting takeoff; 43 died.
- 1947 May 30, BAINBRIDGE, MD.: all 49 passengers and four crew members killed in crash of airliner.
- 1947 June 13, near LEESBURG, VA.: Fifty killed in crash of airliner into mountain on West Virginia-Virginia border.
- 1947 July 13, near MELBOURNE, FLA.: chartered plane crashed, killing 21, including 18 Puerto Ricans.
- 1947 Oct. 24, BRYCE CANYON, UTAH: airliner crashed into hillside after catching fire in midair; 52 killed.
- 1947 Nov. 28, ITALY: Army transport plane en route from Pisa disappeared in Italian Alps with 20 aboard; wreckage was found Aug. 6, 1948.
- 1947 Dec. 10, LABRADOR: transport plane crashed near Goose Bay; 23 of 29 aboard were killed.
- 1947 Dec. 11, MEMPHIS, TENN.: crash of army transport plane killed 20.
- 1948 Jan. 28, near COALINGA, CAL.: chartered plane of U.S. Immigration Service carrying Mexican deportees crashed; 32 killed.
- 1948 March 12, ALASKA: 30 killed when airliner enroute from Shanghai crashed on Mt. Sanford.
- 1948 April 15, EIRE: 30 died when transatlantic airliner crashed while attempting landing at Shannon airport.
- 1948 June 17, near MOUNT CARMEL, PA.: all 43 persons aboard airliner were killed as it crashed and burned; Earl Carroll, theatrical producer, was among victims.
- 1948 July 27, off ADEN, ARABIA: B-29 of U.S. army air force on round-the-world flight fell into sea; 17 missing.
- 1948 Aug. 29, near WINONA, MINN.: all 36 aboard airliner killed when it crashed into bluff on Mississippi River.

Railroad Accidents

WORLD

- 1857 March 17, DES JARDINES CANAL, CANADA: train derailed on bridge; about 60 killed.
- 1864 June 29, near BELOEIL, CANADA: about 90 killed when train ran through open switch.
- 1879 Dec. 28, DUNDEE, SCOTLAND: train blown off Tay bridge; 73 drowned.
- 1881 June 24, near CUARTLA, MEXICO: about 200 died when train fell into river.
- 1882 July 13, near TCHERNY, RUSSIA: more than 150 killed in derailment.
- 1889 June 12, near ARMAGH, IRELAND: about 80 killed in collision.
- 1891 June 14, near BASEL, SWITZERLAND: about 100 killed in collision.
- 1915 May 22, GREYNA, SCOTLAND: two passenger trains and troop train collided; 227 killed.
- 1937 July 17, near PATNA, INDIA: 107 killed in derailment.
- 1938 Dec. 19, near BARBACENA, BRAZIL: about 90 killed in head-on collision.
- 1938 Dec. 25, near KISHINEV, RUMANIA: about 100 killed in collision.
- 1939 Dec. 22, near MAGDEBURG, GERMANY: more than 125 killed in collision; 99 killed in another wreck near Friedrichshafen.
- 1940 Jan. 29, OSAKA, JAPAN: 200 killed in collision.
- 1944 Jan. 10(?), LEÓN PROVINCE, SPAIN: several hundred reported killed in tunnel wreck.

- 1945 Feb. 1, CAZADERO, MEXICO: about 100 killed in collision.

UNITED STATES

- 1856 July 17, near PHILADELPHIA, PA.: train carrying Sunday-school children wrecked; 66 killed.
- 1876 Dec. 29, ASHTABULA, O.: more than 80 killed when train broke through bridge.
- 1887 Aug. 10, near CHATSWORTH, ILL.: about 80 killed in wreck.
- 1904 Aug. 7, near EDEN, COLO.: about 100 killed in collision.
- 1910 March 1, WELLINGTON, WASH.: more than 90 killed.
- 1918 July 9, NASHVILLE, TENN.: more than 100 killed.
- 1938 June 19, MILES CITY, MONT.: train ran through flood-weakened bridge; 47 killed.
- 1940 July 31, CUYAHOGA FALLS, O.: collision killed 43.
- 1943 Sept. 6, PHILADELPHIA, PA.: train derailed; 79 killed.
- 1943 Dec. 16, near RENNEBT, N. C.: 72 killed in derailment and collision.
- 1944 Dec. 31, near OGDEN, UTAH: 48 killed in collision.
- 1946 April 25, NAPERVILLE, ILL.: at least 47 killed in collision.
- 1948 Jan. 1, near OTTERTVILLE, MO.: 14 killed in wreck during snowstorm.







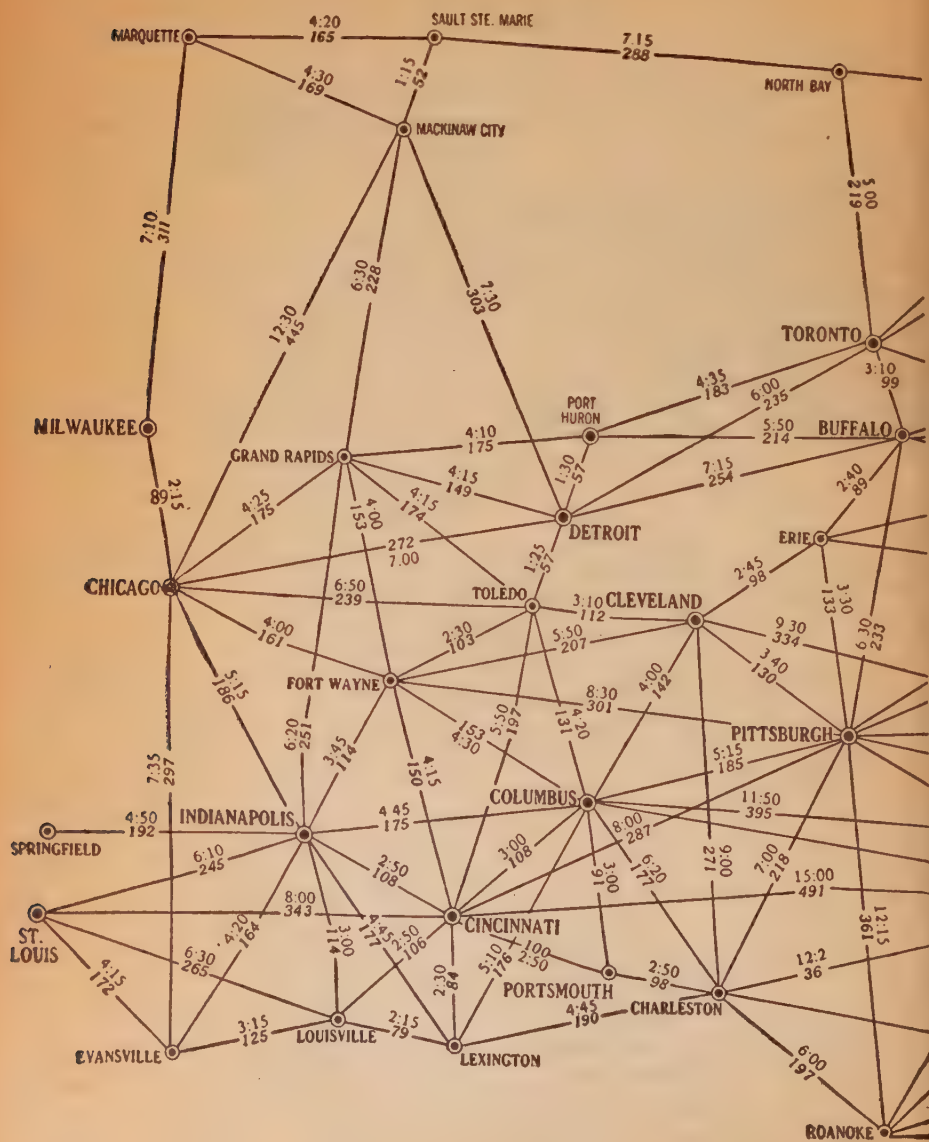


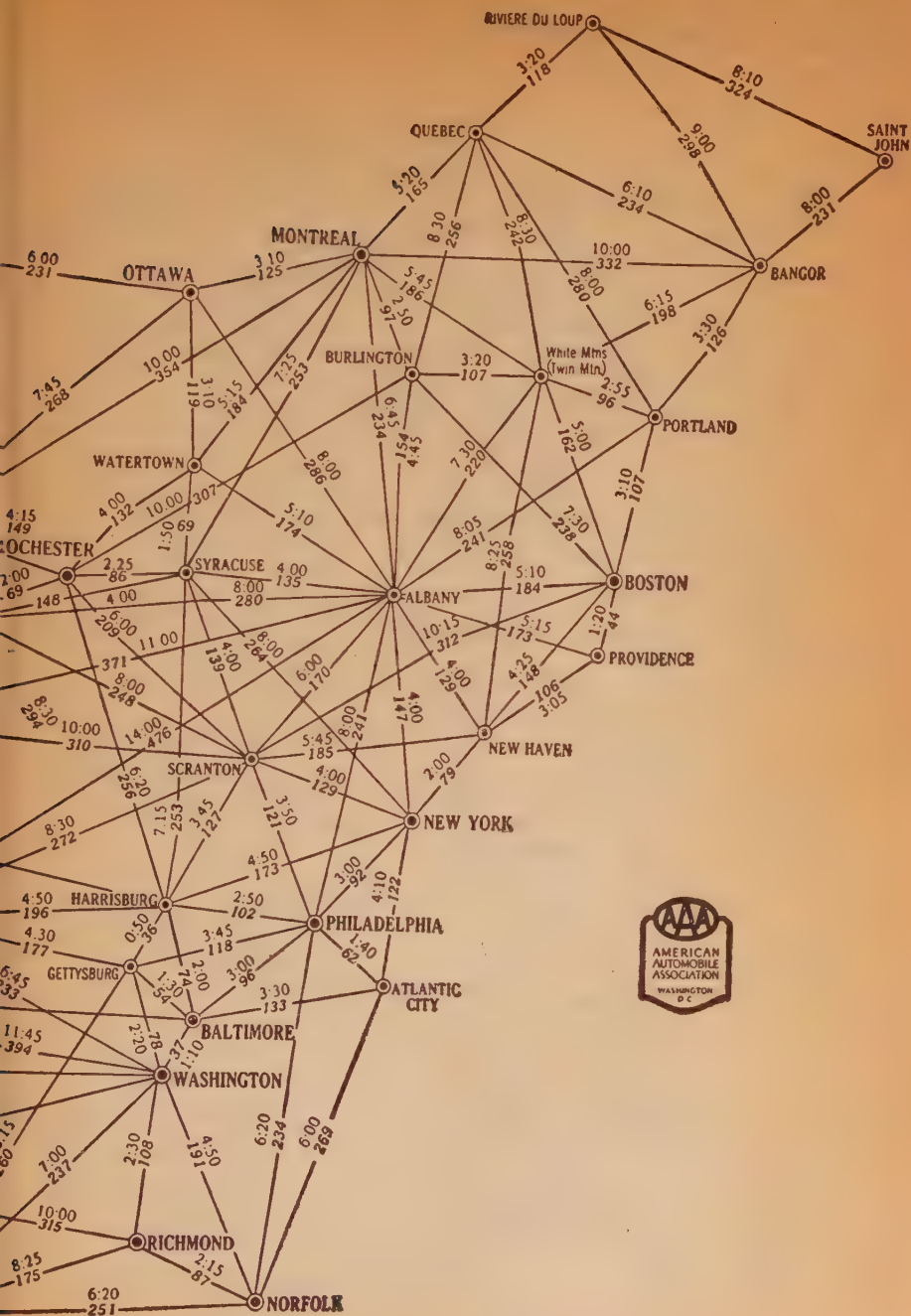




NORTHEASTERN MILEAGE CHART

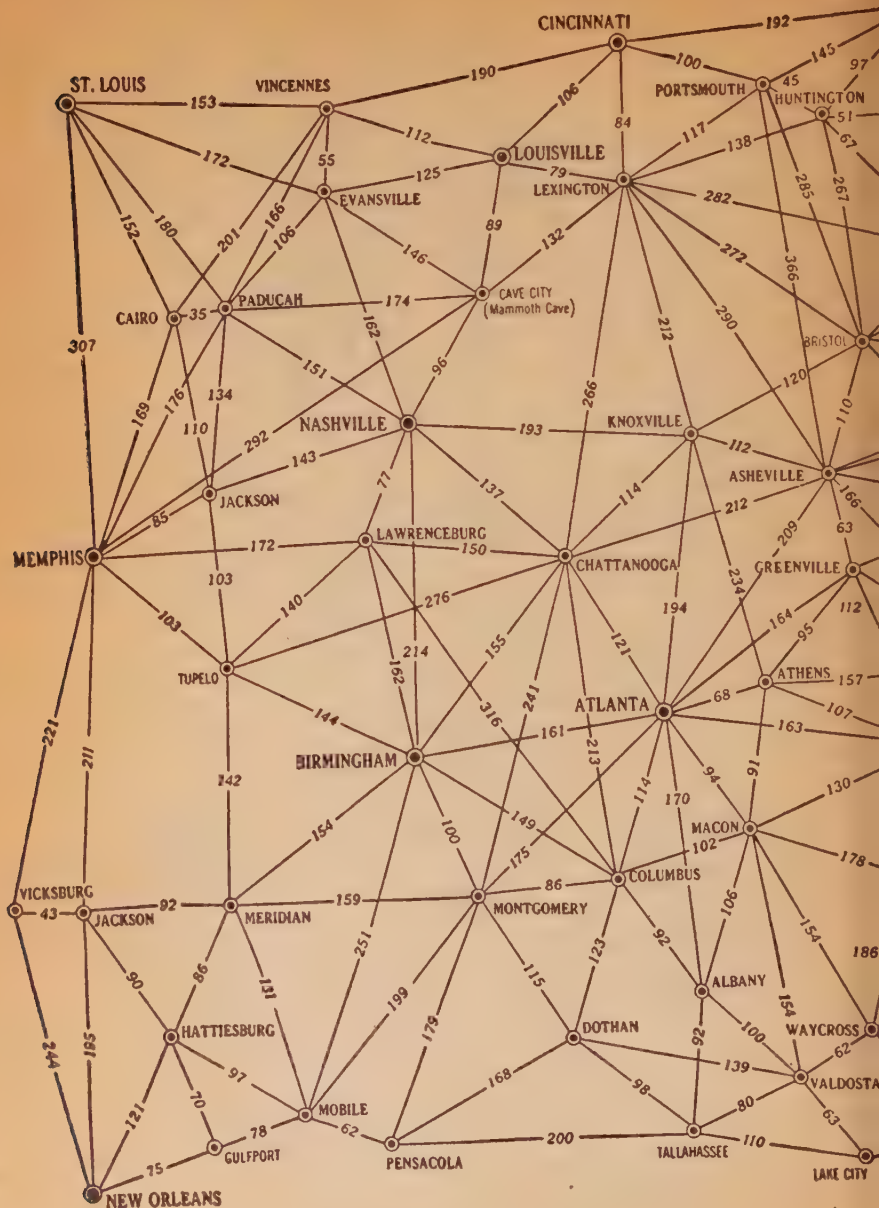
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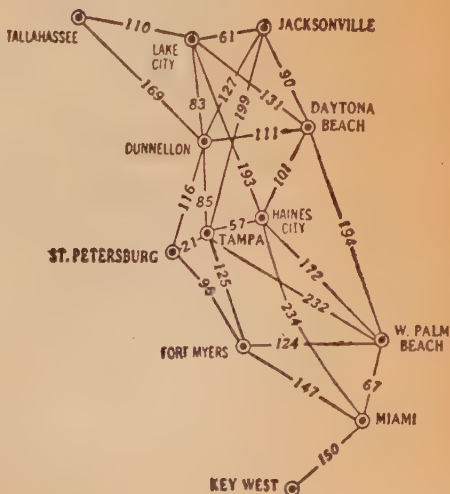
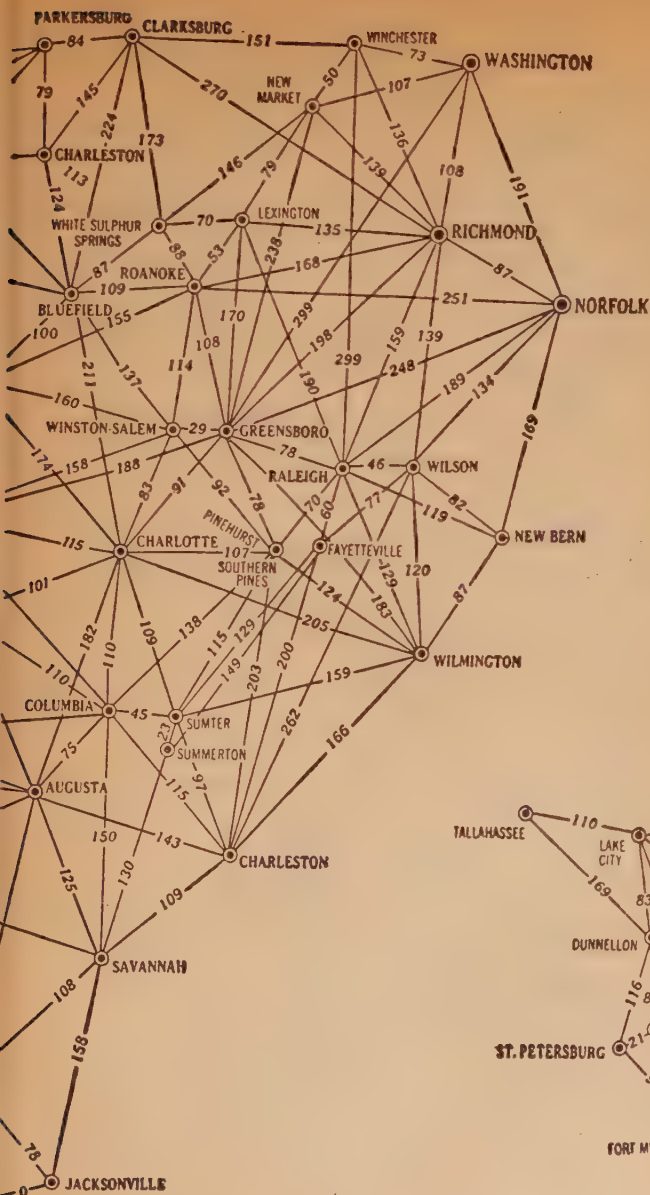


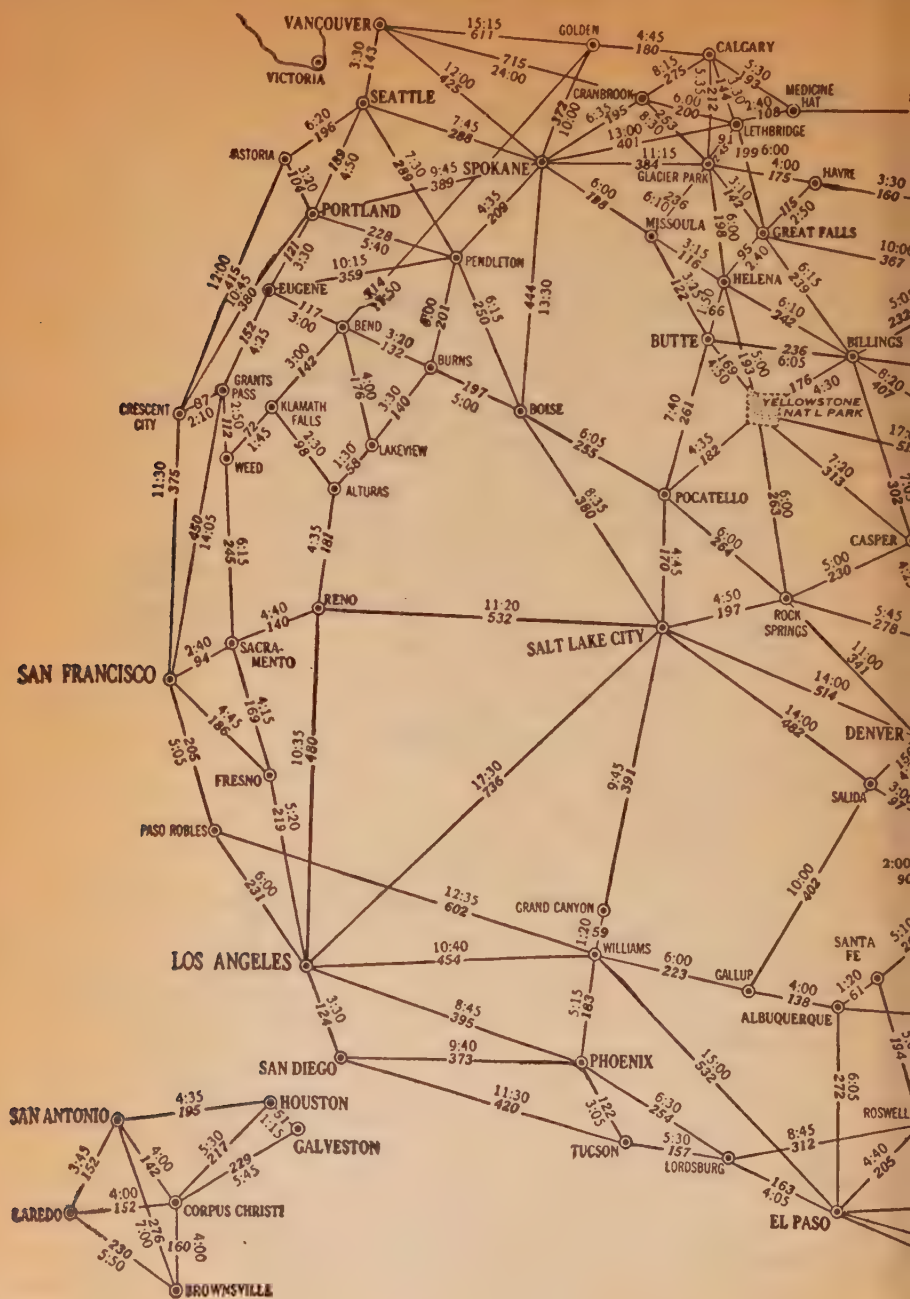


SOUTHEASTERN MILEAGE CHART

Numerals are mileages between towns.

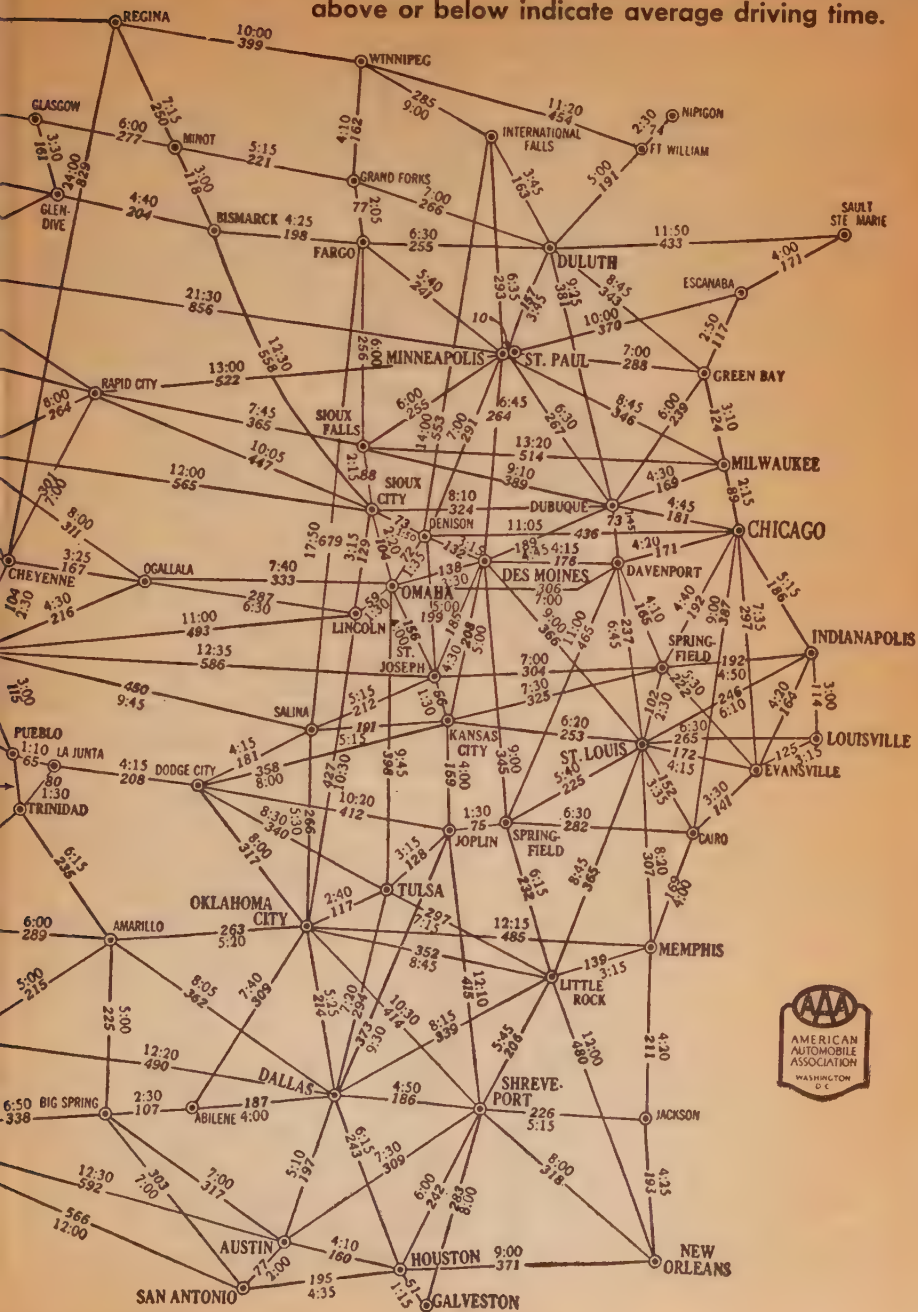






WESTERN MILEAGE CHART

Numerals set into lines indicate mileage. Numerals above or below indicate average driving time.



AVIATION



THE PAST YEAR

By WILLIAM KROGER

Associate Editor, *Aviation Week*

THERE WERE THREE outstanding developments in aviation in 1948, each in a different sphere: operations, technology and legislation.

The most significant operational achievement of the year—and possibly of many years—was the Berlin air lift. While it was reported comprehensively from its inception, it might still be classed as a greatly underrated aviation accomplishment. Its political significance and the humdrum routine with which it was carried out overshadowed its long-range implications.

When the Berlin air lift began June 21, even air officers in Germany doubted that: (a) planes could fly in enough coal for Berlin industry and power; and (b) the air lift could be maintained during winter. By mid-August there was general agreement that sufficient coal could be flown in, and that the air lift could be continued all winter if necessary.

This switch in opinion demonstrated even better than the rising daily tonnage (7,000 tons on one September day as against an initial goal of 4,500 tons) that the Berlin air lift was a success. The significance of that success is that it made obsolete previous military supply planning and thinking. The long-range implication of the Berlin air lift is that the U.S. no longer has to depend upon sea transport in time of war to supply overseas bases.

It is true that the Berlin air lift was a short-haul job; a round trip of about 500 miles, as against round trips of 5,000 to 10,000 miles between the continental U.S. and some overseas points. But the Berlin air lift was carried out mainly with planes designed neither for cargo nor for long range.

In the early stages of the air lift, the U.S. Military Air Transport Service used 52 Douglas C-54 airplanes and 80 Douglas C-47s. Both were designed originally as transport planes. The C-54 carries 10 tons and the C-47, $2\frac{1}{2}$ to 3 tons. After a few weeks, MATS began replacing some of the C-47s with C-54s and by mid-September there were 96 C-54s and 48 C-47s on the run. In addition, MATS put into the Berlin service four of its 14 Douglas C-74 cargo planes, capable of handling nearly 25 tons.

There were several hundred more planes—some especially designed to haul cargo—available in the U.S. if they had been

needed on the Berlin air lift. So the operation, while supplying the needs of some 2,500,000 Berliners, was by no means an exhaustive effort.

One immediate result of the air lift was expected to be a concentrated program of building bigger cargo planes with greater ranges, for both military and commercial purposes. The cost of transporting supplies long distances by air probably will continue for some years to be more expensive than by sea. But the Berlin air lift proved that in any future war, where time and not money is the major factor, planes can do the job.

As American, British and French planes roared into Berlin all day and all night, they pounded home aviation's greatest lesson in utility. But a technological development during 1948 had equal importance. This was the repeated attainment of supersonic speed in service-type jet-powered planes. The first flight at supersonic (faster than sound) speed in a piloted aircraft was made on Oct. 14, 1947 by U.S. Air Force Capt. Charles E. Yeager in a Bell X-1 research plane powered by a rocket engine. The flight was not announced officially until June, 1948. After Yeager's flight, two other Air Force pilots and two test pilots of the National Advisory Committee for Aeronautics also flew the X-1 faster than sound.

Before the Air Force officially confirmed these flights, its own test pilots had exceeded the speed of sound in an XF-86 fighter plane built by North American Aviation, Inc. This plane was powered by a gas turbine (jet propulsion) engine of 4,600 lbs. thrust. (At 375 mph., one thrust pound is equal to one horsepower.) The X-1 rocket engine develops 6,000 lbs. thrust, but unlike a jet engine carries its own oxygen and does not have to rely upon outside air for its operation. In theory, this makes a rocket engine more practical for high-altitude flight where, it has always been assumed, supersonic flight would have to be achieved.

By midsummer, 1948, the production version of the North American plane, the F-86A, was making supersonic flights. This plane, being produced in quantity for the Air Force, probably will be the world's first supersonic combat aircraft.

An indication that 1948 was the year in which piloted supersonic flight first be-

came practical was a British announcement in September that its de Havilland DH-108 jet-powered research plane also had achieved supersonic flight—although in a dive, while the F-86A performed the feat in level flight.

There was no announcement of the speed in miles per hour attained in these supersonic flights, although there were indications that the X-1 reached 1,100 mph. Official reports were limited to the statement that the planes had exceeded "Mach 1.0." In the heavy atmosphere at sea level, sound travels at about 762 mph. As the air thins out at altitude, sound transmission slows down so that the speed of sound at 30,000 feet is about 675 mph. In order to simplify calculations, engineers use a measurement system developed by an Austrian physicist, Ernst Mach, in which the speed of sound at any altitude is Mach 1.0. Mach 0.8, for example, is eight-tenths the speed of sound. At sea level this would be about 611 mph.

The increasing speed of military air-planes also was demonstrated on September 15, 1948, when Major Richard L. Johnson, of the U.S.A.F., piloted an Air Force F-86A at 670.98 mph.—to establish a new world's record—at Muroc Air Base, California.

The third most important aviation development during the year was the largest peacetime appropriation in history for procurement of planes for the Navy and Air Force. Congress voted a total of \$2,295,100,000 for 2,727 Air Force and 1,535 Navy planes. Orders for 3,366 of these planes—2,201 Air Force and 1,165 Navy—were announced in midsummer shortly after the funds became available. The balance of the money, \$297,000,000, was expected to be allocated later in the year.

This legislative victory of aviation was important in two respects. It enables the Air Force and the Navy to begin their modernization tasks. Just as important, it enables the aircraft manufacturing industry to maintain a nucleus of a readily expandable production establishment. At the time the appropriation cleared Congress, several major airframe manufacturers reported that work on existing contracts was

nearing an end. There is little doubt that, in the absence of new military contracts, the U.S. aircraft manufacturing industry by the end of the year would have shrunk to smaller than prewar size.

The financial condition of U.S. airlines continued to decline in 1948. Because of this there was little transport business to help the manufacturers. In the second half of the year some of the airlines, by cutting expenses and raising rates, were showing slight financial upturns, but by no means enough to wipe out first-half deficits that soared higher than the year before. (For the full year 1947, total airline deficit was more than \$20,000,000.)

Adding to the airlines' difficulties was the fact that in the first six months of 1948, passenger traffic was about 3 percent below the similar period of 1947. This was part of a general decline in first-class travel which hit railroads even harder than it did airlines. (First-class rail travel fell 11 percent.) In the first six months of 1948, domestic passenger revenue miles totaled 2,756,370,000, compared to 2,846,857,000 in the first half of 1947.

The bright side of the airline picture was a jump in cargo business. In the first half of the year, the 16 domestic trunklines flew 29,888,742 freight ton miles as against 12,286,966 in the like period of the previous year. The air freight business was handicapped, however, by lack of suitable cargo planes. There were several excellent designs in the engineering stage, and substantial cargo plane orders would have aided materially the manufacturers' fortunes. But airlines did not have the cash.

The manufacturers were not afforded any relief by the personal aircraft field. Sales of this type of plane continued to fall in 1948. The peak year was 1946 when about 33,000 personal planes sold for approximately \$92,000,000. In 1947, the figures were 15,338 planes, \$55,000,000. In 1948, totals were expected to be no higher than 10,000 planes nor more than \$30,000,000.

If it had not been for the military contracts, the aircraft manufacturing industry—whose 1947 production was valued at more than one billion dollars—would have shrunk to inconsequential size by the end of 1948.

Famous Firsts in Aviation

THOUGH man succeeded in making powered flight only 45 years ago, his dreams of flying go back to mythology.

The principle of jet propulsion, for example, was understood and put into design form some 2,000 years ago by Hero, an Alexandrian philosopher. And as far back as A.D. 1232, Genghis Khan's son, Ogdai, used rockets as a "secret weapon" in an

attack on the Tartar city of Kaifeng. In 1480, Leonardo da Vinci drew sketches for what we now call helicopters.

Man's first aeronautical successes came in balloons.

1782—First balloon flight. Jacques and Joseph Montgolfier of Annonay, Fr., sent up a small smoke-filled balloon about mid-November.

- 1783—First hydrogen-filled balloon flight.** Jacques A. C. Charles, Paris physicist, supervised construction by A. J. and M. N. Robert of a 13-ft. diameter balloon which was filled with hydrogen. It got up to about 3,000 ft. and traveled about 16 mi. in a 45-min. flight (Aug. 27).
- 1783—First human balloon flights.** A Frenchman, Jean Pilâtre de Rozier, made the first captive balloon ascension (Oct. 15). With the Marquis d'Arlandes, Pilâtre de Rozier made the first free flight, reaching a peak altitude of about 500 ft., and traveling about 5½ mi. in 20 min. (Nov. 21).
- 1784—First powered balloon.** Gen. Jean Baptiste Marie Meusnier developed the first propeller-driven and elliptically-shaped balloon—the crew cranking three propellers on a common shaft to give the craft a speed of about 3 mi. per hr.
- 1784—First woman to fly.** Mme. Thible, a French opera singer (June 4).
- 1793—First balloon flight in America.** Jean Pierre Blanchard, a French pilot, made it from Philadelphia to near Woodbury, Gloucester Co., N. J., in a little over 45 min. (Jan. 9).
- 1794—First military use of the balloon.** Jean Marie Coutelle, using a balloon built for the French Army, made two 4 hr. observation ascents. The military value of the ascents seems to have been in damage to the enemy's morale.
- 1797—First parachute jump.** André-Jacques Garnerin dropped from about 6,500 ft. over Monceau Park in Paris in a 23-ft. diameter 'chute made of white canvas with a basket attached (Oct. 22).
- 1843—First air transport company.** In London, William S. Henson and John Stringfellow filed articles of incorporation for the Aerial Transit Company (Mar. 24). It failed.
- 1852—First dirigible.** Henri Giffard, a French engineer, flew in a controllable (more or less) steam engine-powered balloon, 144 ft. long and 39 ft. in diameter, inflated with 88,000 cu. ft. of coal gas. It reached 6.7 mi. per hr. on a flight from Paris to Trappe (Sept. 24).
- 1860—First aerial photographers.** Samuel Archer King and William Black made two photos of Boston, still in existence.
- 1872—First gas-engine powered dirigible.** Paul Haenlein, a German engineer, flew in a semi-rigid frame dirigible, powered by a 4-cylinder internal combustion engine running on coal gas drawn from the supporting bag.
- 1873—First transatlantic attempt.** *The New York Daily Graphic* sponsored the attempt with a 400,000 cu. ft. balloon carrying a lifeboat. A rip in the bag during inflation brought collapse of the balloon and the project.
- 1897—First successful metal dirigible.** An all-metal dirigible, designed by David Schwarz, a Hungarian, took off from Berlin's Tempelhof Field and, powered by a 16-hp. Daimler engine, got several miles before leaking gas caused it to crash (Nov. 13).
- 1900—First Zeppelin flight.** Germany's Count Ferdinand von Zeppelin flew the first of his long series of rigid-frame airships. It attained a speed of 18 mi. per hr. and got 3½ mi. before its steering gear failed (July 2).
- 1903—First successful heavier-than-air machine flight.** Aviation was really born on the sand dunes at Kitty Hawk, N. C., when Orville Wright crawled to his prone position between the wings of the biplane he and his brother Wilbur had built, opened the throttle of their home-made 12-hp. engine and took to the air. He covered 120 ft. in 12 sec. Later that day, in one of four flights, Wilbur stayed up 59 sec. and covered 852 ft. (Dec. 17).
- 1904—First airplane maneuvers.** Orville Wright made the first turn with an airplane (Sept. 15); 5 days later his brother Wilbur made the first complete circle.
- 1905—First airplane flight over half an hour.** Orville Wright kept his craft up 33 min. 17 sec. (Oct. 4).
- 1906—First European airplane flight.** Alberto Santos-Dumont, a Brazilian, flew a heavier-than-air machine at Bagatelle Field, Paris (Sept. 13).
- 1908—First airplane fatality.** Lt. Thomas E. Selfridge, U. S. Army Signal Corps, was in a group of officers evaluating the Wright plane at Fort Myer, Va. He was up about 75 ft. with Orville Wright when the propeller hit a bracing wire and was broken, throwing the plane out of control, killing Selfridge and seriously injuring Wright (Sept. 17).
- 1910—First licensed woman pilot.** Baroness Raymonde de la Roche of France, who learned to fly in 1909, received ticket No. 36 on March 8.
- 1910—First flight from shipboard.** Eugene Ely took a Curtiss plane off from the deck of cruiser *Birmingham* at Hampton Roads, Va., and flew to Norfolk (Nov. 14). The following January he reversed the process, flying from Camp Selfridge to the deck of the battleship *Pennsylvania* in San Francisco Bay (Jan. 18).
- 1911—First U. S. woman pilot.** Harriet Quimby, a magazine writer, who got ticket No. 37.
- 1913—First multi-engined aircraft.** Built and flown by Igor Ivan Sikorsky while still in his native Russia.
- 1914—First aerial combat.** In August, Allied and German pilots and observers started shooting at each other with pistols and rifles—with negligible results.

- 1915—First air raids on England. German Zeppelins started dropping bombs on four English communities (Jan. 19).
- 1918—First U. S. air squadron. The U. S. Army Air Corps made its first independent raids over enemy lines, in DH-4 planes (British-designed) powered with 400-hp. American-designed Liberty engines (Apr. 8).
- 1918—First regular airmail service. Operated for the Post Office Department by the Army, the first regular service was inaugurated with one round trip a day (except Sunday) between Washington, D. C., and New York City (May 15).
- 1919—First transatlantic flight. The NC-4, one of four Curtiss flying boats commanded by Lt. Comdr. Albert C. Read, reached Lisbon, Port. (May 27) after hops from Trepassy Bay, Nfd. to Horta, Azores (May 16-17), to Ponta Delgada (May 20). The Liberty-powered craft was piloted by Walter Hinton.
- 1919—First nonstop transatlantic flight. Capt. John Alcock and Lt. Arthur Whitten Brown, British World War I flyers, made the 1,900 mi. from St. John's, Nfd. to Clifden, Ire., in 16 hr. 12 min. in a Vickers-Vimy bomber with two 350-hp. Rolls-Royce engines (June 15-16).
- 1919—First lighter-than-air transatlantic flight. The British dirigible R-34, commanded by Maj. George H. Scott, left Firth of Forth, Scot. (July 2) and touched down at Mineola, L. I., 108 hr. later. The eastbound trip was made in 75 hr. (completed July 13).
- 1919—First scheduled passenger service (using airplanes). Aircraft Travel and Transport inaugurated London-Paris service (Aug. 25). Later the company started the first trans-channel mail service on the same route (Nov. 10).
- 1921—First naval vessel sunk by aircraft. Two battleships being scrapped by treaty were sunk by bombs dropped from Army planes in demonstration put on by Brig. Gen. William S. Mitchell (July 21).
- 1921—First helium balloon. The C-7, non-rigid Navy dirigible was first to use non-inflammable helium as lifting gas, making a flight from Hampton Roads, Va., to Washington, D. C. (Dec. 1).
- 1922—First member of Caterpillar Club. Lt. (later Maj. Gen.) Harold Harris bailed out of a crippled plane he was testing at McCook Field, Dayton, Ohio (Oct. 20), and became the first man to join the Caterpillar Club—those whose lives have been saved by parachute.
- 1923—First nonstop transcontinental flight. Lts. John A. Macready and Oakley Kelly flew a single-engine Fokker T-2 nonstop from New York to San Diego, a distance of just over 2,500 mi. in 26 hr. 50 min. (May 2-3).
- 1923—First autogyro flights. Juan de la Cierva, brilliant Spanish mathematician, made the first successful flight in a rotary wing aircraft in Madrid (June 9).
- 1924—First round-the-world flight. Four Douglas Cruiser biplanes of the U. S. Army Air Corps took off from Seattle under command of Maj. Frederick Martin (Apr. 6). 175 days later two of the planes (Lt. Lowell Smith's and Lt. Erik Nelson's) landed in Seattle after a circuitous route—one source saying 26,345 mi., another saying 27,553 mi.
- 1926—First polar flight. Then-Lt. Cmdr. Richard E. Byrd, acting as navigator, and Floyd Bennett as pilot, flew a trimotor Fokker from Kings Bay, Spitsbergen, over the North Pole and back in 15½-hr. flight (May 8-9).
- 1927—First solo transatlantic flight. Charles Augustus Lindbergh lifted his Wright-powered Ryan monoplane, *Spirit of St. Louis*, from Roosevelt Field, L. I., to stay aloft 33 hr. 39 min. and cover 3,600 mi. to Le Bourget Field outside Paris (May 20-21).
- 1927—First transatlantic passenger. Charles A. Levine was piloted by Clarence D. Chamberlin from Roosevelt Field, L. I., to Eisleben, Ger., in a Wright-powered Bellanca (June 4-5).
- 1928—First east-west transatlantic crossing. Baron Guenther von Huenefeld, piloted by German Capt. Hermann Koehl and Irish Capt. James Fitzmaurice, left Dublin for New York City (Apr. 12) in a single-engine all-metal Junkers monoplane. Some 37 hr. later they cracked up on Greenly Island, Labrador. They were rescued.
- 1928—First U. S.-Australia flight. Sir Charles Kingsford-Smith and Capt. Charles T. P. Ulm, Australians, and two American navigators, Harry W. Lyon and James Warner, crossed the Pacific from Oakland to Brisbane. They went via Hawaii and the Fiji Islands in a trimotor Fokker (May 31-June 8).
- 1928—First trans-Arctic flight. Sir Hubert Wilkins, Australian explorer, piloted by Carl Ben Eielson, flew from Point Barrow, Alaska, to Spitsbergen (mid-April).
- 1929—First of the endurance records. With Air Corps Maj. Carl Spaatz in command and Capt. Ira Eaker as chief pilot, an Army Fokker, aided by refueling in the air, remained aloft 150 hr. 40 min. at Los Angeles (Jan. 1-7).
- 1929—First blind flight. James H. Doolittle proved the feasibility of instrument flying when he took off and landed entirely on instruments (Sept. 24).
- 1929—First rocket engine flight. Fritz von Opel, German auto maker, stayed aloft in his small rocket-powered craft for 75 sec., covering nearly 2 mi. (Sept. 30).

1929—First South Pole flight. Comdr. Richard E. Byrd, with Bernt Balchen as pilot, Harold I. June, radio operator, and Capt. A. C. McKinley, photographer, flew a trimotor Fokker from the Bay of Whales, Little America, over the South Pole and back (Nov. 28-29).

1930—First Paris-New York nonstop flight. Dieudonné Coste and Maurice Bellonte, French pilots, flew a Hispano-powered Breguet biplane from Le Bourget Field to Valley Stream, L. I., in 37 hr. 18 min. (Sept. 2-3).

1931—First flight into the stratosphere. Prof. Auguste Piccard, Swiss physicist, and Charles Knipfer, ascended in a balloon from Augsburg, Ger., and reached a height of 51,793 ft. in a 17-hr. flight that terminated on a glacier near Innsbruck, Aus. (May 27).

1931—First nonstop transpacific flight. Hugh Herndon and Clyde Pangborn took off from Sabishiro Beach, Japan, dropped their landing gear and flew 4,860 mi. to near Wenatchee, Wash., in 41 hr. 13 min. (Oct. 4-5).

1932—First woman's transatlantic solo. Amelia Earhart, flying a Pratt & Whitney Wasp-powered Lockheed Vega, flew alone from Harbor Grace, Nfld., to Ireland in approximately 15 hr. (May 20-21).

1932—First westbound transatlantic solo. James A. Mollison, British pilot, took a de Havilland Puss Moth from Portmarnock, Ire., to Pennfield, N. B. (Aug. 18).

1932—First woman airline pilot. Ruth Rowland Nichols, first woman to hold three international records at the same time—speed, distance, altitude—was employed by the N.Y.-New England Airways.

1933—First round-the-world solo. Willey Post took a Lockheed Vega, *Winnie Mae*, 15,596 mi. around the world in 7 days 18 hr. 49½ min. (July 15-22).

1937—First successful helicopter. Hanna Reitsch, German woman pilot, flew Dr. Heinrich Focke's FW-61 in free, fully-controlled flight at Bremen (July 4).

1939—First turbojet flight. Just before their invasion of Poland, the Germans flew a Heinkel He-178 plane powered by a Heinkel S3B turbojet (Aug. 27).

1942—First American jet plane flight. Robert Stanley, chief pilot for Bell Aircraft Corp., flew the Bell XP-59 *Airacomet* at Muroc Army Base, Calif. (Oct. 1).

1947—First piloted supersonic flight in an airplane. Capt. Charles E. Yeager, U. S. Air Force, flew the X-1, rocket-powered research plane built by Bell Aircraft Corp., faster than the speed of sound at Muroc Air Force Base, Calif. (Oct. 14).

How U. S. Aviation Is Governed

U. S. aviation comes under two bodies—Civil Aeronautics Administration (CAA) and Civil Aeronautics Board (CAB).

The Board consists of five men appointed by the President, subject to Senate approval, and operates as an independent agency. It is concerned mainly with economic and safety regulations and investigation of civil aircraft accidents.

The Administration, a branch of the Dept. of Commerce, is primarily an operating agency having seven main services:

Office of Federal Airways—builds and operates civil airways, controls traffic, and operates communications, weather reporting stations and other air navigation aids.

Office of Airports—advises on and develops airport design and construction.

Office of Safety Regulation—enforces

regulations in certification of planes, pilots, mechanics and agencies. It works closely with CAB's Safety Bureau, referring violations to the Board and administering regulations passed by the Board.

Office of Aviation Information—handles publicity and statistics, publishes monthly CAA Journal and CAB news.

Office of Aviation Training—furnishes technical information to schools offering air education and conducts the Inter-American Aviation Training Program.

Office of Field Operations—coordinate CAA activities abroad and handles liaison work on international conferences and foreign missions.

Office of Business Management—handles budget, accounts, personnel, contract and other "housekeeping" jobs.

A Few Current Aviation Terms

Athodyd—a form of ramjet, the term coming from Aero-Thermo-Dynamic Duct.

Axial flow compressor—one that compresses air in a flow parallel to the axis of rotation through a series (or multiple stages) of compressor blades.

Centrifugal compressor—one that compresses air in a direction tangential to the rotating member (or impeller), sometimes likened to a cream separator set on its side.

Critical speed—that at which compressi-

bility effects begin to be encountered. Most propeller-driven aircraft don't reach critical speed in level flight (because of lack of power) but can hit it in dives. Many jet-propelled planes, however, can reach it in level flight.

Supersonic speed—that which is faster than the speed of sound.

Transonic Range—a little-known "belt" between about 600 and 900 miles an hour—around Mach number .7 to 1.2—where

Helicopter Records

DISTANCE, AIRLINE

International & U. S.: 703.6 miles
 Maj. F. T. Caschman, pilot, Maj. W. E. Zins, copilot, (US), Sikorsky R-5, powered by 450-hp. Pratt & Whitney, from Dayton, O. to Logan Field, Boston, Mass. May 22, '46.

DISTANCE, CLOSED CIRCUIT

International & U. S.: 621,369 miles
 Maj. D. H. Jensen & Maj. W. C. Dodds, (US), Sikorsky R-5A, powered by 450-hp. Pratt & Whitney, Dayton, O. Nov. 14, '46.

ALTITUDE

International & U. S.: 19,167 feet
 Maj. E. M. Cassell, (US), Sikorsky R-5A, powered by 935-AN-5 450-hp. Pratt & Whitney, Patterson Field, Dayton, O., Feb. 10, '47

SPEED FOR 1,000 KILOMETERS IN A CLOSED CIRCUIT (625 MILES)

International & U. S.: 107,251 km. ph. (66,642 mph.)
 Maj. D. H. Jensen & Maj. W. C. Dodds, (US), Sikorsky R-5A, powered by 450-hp. Pratt & Whitney, Dayton, O., Nov. 14, '46.

DURATION, CLOSED CIRCUIT

International & U. S.: 9 hr., 57 min.
 Maj. D. H. Jensen & Maj. W. C. Dodds, (US), Sikorsky R-5A, powered by 450-hp. Pratt & Whitney, Dayton, O., Nov. 14, '46

Certificated U. S. Airplane Pilots

Source: Civil Aeronautics Administration.

Year	Total	Airline transport	Commercial	Private
1937.....	17,681	1,064	6,411	10,206
1938.....	22,983	1,159	7,839	13,985
1939.....	33,706	1,197	11,677	20,832
1940.....	69,829	1,431	18,791	49,607
1941.....	129,947	1,587	34,578	93,782
1942.....	166,626	2,177	55,760	108,689
1943.....	173,206	2,315	63,940	106,951
1944.....	183,383	3,046	68,449	111,888
1945.....	296,895	5,815	162,873	128,207
1946.....	400,061	7,654	203,251	189,156
1947.....	455,000	7,750	200,000	247,250

Aviation Terms—(cont.)

compressibility begins to be serious. Since it's tied up with Mach numbers, the exact speed at which it begins will depend on the individual airplane, altitude and temperature conditions.

Turbojet—a thermal jet engine in which air is compressed (by a centrifugal or axial flow compressor or combination of both), heated by combustion of fuel at about compressor pressure, released through a turbine which drives the compressor and then is exhausted at high

U. S. Scheduled Airlines

Domestic (Trunk)

Airline	Certificated route mileage	Revenue passenger miles, 1947
All American.....	1,521	72,310*
American.....	17,907	1,320,775,000
Braniff.....	4,831	199,634,000
Caribbean Atlantic.....	206	4,205,108
Chicago & Southern.....	6,162	111,643,000
Colonial.....	1,367	38,582,000
Continental.....	2,918	58,926,000
Delta.....	5,811	201,048,000
Eastern.....	13,507	884,300,000
Hawaiian.....	356	42,635,069
Inland.....	1,910	27,810,000
Mid-Continent.....	4,474	81,873,000
National.....	2,632	157,343,000
Northeast.....	2,109	62,142,000
Northwest.....	11,043	346,873,000
PCA (Capital).....	4,888	288,470,000
Trans-World (TWA).....	11,405	817,883,000
United.....	17,887	1,186,604,000
Western.....	3,121	166,396,000
Total.....	114,055	5,997,214,487

Domestic (Feeder)

Air Commuting . . . . .	.....	†
Arizona Airways	1,015	†
Central	1,308	†
Challenger	1,613	2,489,000
Empire	709	2,510,000
Florida	463	900,732
Iowa Airplane Co.	1,251	†
Island Air Ferries	155	†
Los Angeles Airways	300	2,033*
Monarch	1,609	3,916,000
Parks Air Transport	1,647	†
Piedmont	1,715	†
Pioneer	1,417	16,513,000
Robinson	530	†
Southern Airways	1,374	†
Southwest	1,179	14,975,000
Trans-Texas	1,824	311,000
Turner Aero. Corp.	645	†
West Coast	885	4,827,483
Wiggins	643	†
Wisconsin-Central	1,717	†
Yellow Cab Co. . . . .	.....	†
Total	21,999	46,444,248

International

American.....	1,550	58,548,000
American Overseas.....	9,066	168,360,000
Braniff.....	7,600	†
Chicago & Southern.....	3,697	6,698,000
Colonial.....	2,030	3,335,000
Eastern.....	917	16,469,000
National.....	445	9,531,000
Northwest.....	15,198	35,668,000
Pan American.....	94,517	1,142,593,000
Pan American Grace.....	10,666	106,558,000
TWA.....	21,108	220,418,000
Western.....	1,640	†
Total.....	168,434	1,768,178,000

*Ton miles, mail and express (no passengers).
 †Had not yet begun operations.

velocity through the exhaust nozzle (also called the tail pipe or tail cone).

International Airplane Records

Source: National Aeronautic Association.

(over 3-kilometer—1.864 mi. course)

Speed (mph)	Date	Type plane	Pilot	Place
266.583	Nov. 4, '23		Lt. Williams (USA)	Mineola
278.480	Dec. 11, '24		Adj. Bonnet (France)	Istres
294.380	Sept. 3, '32		Maj. J. H. Doolittle (U.S.A.)	Cleveland
304.980	Sept. 4, '33	Wedell-Williams	James R. Wedell (U.S.A.)	Chicago
314.320	Dec. 25, '34		Raymond Delmotte (France)	Istres
352.388	Sept. 13, '35	Hughes	Howard Hughes (U.S.A.)	Santa Anna
379.626	Nov. 11, '37		Herman Wunster (Germany)	Augsburg
469.220	Apr. 26, '39		Fritz Wendell (Germany)	Augsburg
606.255	Nov. 7, '45	Gloster Meteor IV	Gp. Capt. H. Wilson (Gr. Britain)	Herne Bay
616.	Sept. 7, '46	Gloster Meteor	Gp. Capt. E. M. Donalson (Gr. Britain)	Sussex Coast
		Jet propelled		
623.738	June 19, '47	Lockheed P-80R	Col. Albert Boyd (U.S.A.)	Muroc AF, Calif.
640.7	Aug. 20, '47	Douglas D-558	Comdr. T. F. Caldwell, Jr. (U.S.A.)	Muroc AF, Calif.
650.6	Aug. 25, '47	Douglas D-558	Maj. Marion Carl, USMC (U.S.A.)	Muroc AF, Calif.
670.9	Sept. 15, '48	North American F-86A	Maj. R. L. Johnson (U.S.A.F.)	Muroc AF, Calif.

(Fastest U. S. transcontinental—Col. W. H. Councill, Lockheed P-80, from Long Beach, Calif. to La Guardia Field, N. Y.—2,453.8 mi., in 4 hr., 13 min., 26 sec., average speed 580.9 mph.—Jan. 26, '46.)

Distance

Distance (mi.)	Date	Crew	From	To
3,352.91	Oct. 28-29, '26	Costes & Capt. Rignot (France)	Le Bourget	Jask
3,910.90	June 4-6, '27	Clarence D. Chamberlain, A. Levine (U.S.A.)	New York	Eisleben, Germany
4,466.57	July 3-5, '28	A. Ferrarin, Del Prete (Italy)	Rome	Touros
4,911.93	Sept. 27-29, '29	Costes & Beonte (France)	Le Bourget	Moulant
5,011.35	July 28-30, '31	Russel N. Boardman, John Polando (U.S.A.)	New York	Istanbul
5,656.95	Aug. 5-7, '33	Rossi, Codos (France)	New York	Ryack
6,305.66	July 12-14, '37	Col. M. Gromov, Youmachew, Daniline (U.S.S.R.)	Moscow	San Jacinto, Calif.
7,158.44	Nov. 5-7, '38	Sqd. Ldr. R. Kellett (Gr. Britain)	Ismalia (Suez)	Darwin
7,916*	Nov. 19-20, '45	Col. C. S. Irvine, pilot, Lt. Col. G. R. Stanley, copilot (U.S.A.)	Guam	Washington, D. C.
11,235.6	Sept. 29—Oct. 1, '46	Cmdr. Thomas D. Davis, Cmdrs. Eugene P. Ranklin, Walter S. Reid, Lt. Comdr. Ray A. Tabeling (U.S.A.)	Perth, Australia	Columbus, Ohio

*Subject to homologation of Federation Aeronautique Internationale.

Distance (Closed Course)

Distance (mi.)	Date	Crew	Place
2,895.970	Aug. 3, '27	Edzard & Ristics (Germany)	Dessau
4,763.700	May 31—June 2, '28	Capt. Ferrarin & Del Prete (Italy)	Casal e del Paati
4,988.969	Dec. 15-17 '30	Costos & Codos (France)	Istres
5,088.275	May 31—June 2, '30	U. Maddalena & F. Cecconi (Italy)	Montecelio
6,444.881	June 7-10, '31	J. LeBrix & M. Dorat (France)	Istres
6,587.442	Mar. 23-26, '32	Bossoutrot & Rossi (France)	Oran
7,239.588	May 13-15, '38	Comm. Fujita & Sgt. Maj. Takahashi (Japan)	Kisarazu
8,037.899	July 30—Aug. 1, '39	Angelo Tondi, Ferruccio Viquoli, pilots, Aldo Stagliano, mech. (Italy)	Rome
8,854.308	Aug. 1-3, '47	Lt. Col. O. F. Lasser, pilot (U.S.) Capt. W. J. Valentine, co-pilot (U.S.)	United States

(U. S. Record 3,129.219 mi. in Boeing XB-15, Aug 1-2, '39, Maj. C. V. Haynes, Capt. W. D. Old, pilots, Capt. W. G. Bryte, Lt. A. C. Brandt, Sgts. A. Cattarius & D. L. Spier, Cpl. J. E. Sands, crew, Dayton.)

Altitude

Height (feet)	Date	Crew	Place
38,419	July 25, '27	Lt. C. C. Champion (U.S.A.)	Washington
41,795	May 26, '29	Willi Neuenhofen (Germany)	Dessau
43,166	June 4, '30	Lt. Apollo Soucek (U. S. A.)	Washington
43,976	Sept. 16, '32	Capt. Cyril F. Uwins (Gr. Britain)	Filton, Bristol
44,819	Sept. 28, '33	G. Lemoine (France)	Villacoublay
47,352	April 11, '34	Com. Renato Donati (Italy)	Rome
49,994	Sept. 28, '36	Sqdrn. Ldr. S. R. D. Swain (Gr. Britain)	South Farnborough
53,937	June 30, '37	Fl. Lt. M. J. Adam (Britain)	Farnborough
56,046	Oct. 22, '38	Col. Mario Pezzi (Italy)	Montecelio
59,492	Mar. 23, '48	John Cunningham (Gr. Britain)	England

Absolute Altitude—72,394.795 ft. Capts. Orvil Anderson & Albert Stevens, U. S., Nov. 11, 1935, from Rapid City, S. D., in balloon.

U. S. Airplane Record—47,910 ft. Maj. F. F. Ross, pilot, Lt. D. M. Davis, copilot, Lts. L. B. Barrier, C. B. Webster, F/O P. Morrissett, Sgt. W. S. George, Harmon Field, Guam, May 15, 1946, Boeing B-29.

Important American Aircraft Types

(A. Corp.—Aircraft Corporation. A.C.—Aircraft Company. E. & A. Corp.—Engine & Airplane Corporation.)

Manufacturer	Name or model no.	Seats	No. and make engine	Engine, hp.	High speed	Cruising speed	Gross weight	Span ft. in.	Length ft. in.
Executive, Transport									
Beech A. Corp.	D-18S	4-9	2 P & W	450	230	211	8,500	47 7	33 1½
Beech Airplane Co.	Stratocruiser	57-85	4 P & W R-4360	3,500	375	340	135,000	141 3	110 4
Consolidated Vultee A. Corp.	Convair-Liner	36-40	2 P & W R-2800	2,400	336	300	39,500	91 9	74 8
Douglas A. C.	DC-3	21	2 P & W R-1830	1,050	234	202	25,200	95	64 5½
	DC-4	48-58	4 P & W R-2000	1,200	246	231	73,000	117 6	93 5
	DC-6	55	4 P & W R-2800	2,100	352	301	93,200	117 6	100 7
Lockheed A. Corp.	Constellation	44-62	4 Wright R-3350	2,500	346	309	102,000	123	95 3
G. L. Martin Co.	Z-0-2	36-40	2 P & W R-2800	2,400	310	260	39,900	93 3¾	71 4
Personal									
Aeronca A. Corp.	Sedan	4	1 Continental	145	120	105	2,050	37 6	25 3
Beech A. Corp.	Bonanza	4	1 Continental	185	184	172	2,550	32 10	25 2
Cessna A. C.	140	2	1 Continental	90	125+	105+	1,450	32 10	21 6
	170	4	1 Continental	145			2,200	36 0	24 1½
Consol. Vultee, Stinson Div.	Stinson	4	1 Franklin	165	150	130	2,400	34 0	25 2
Engrg. & Research Corp.	Ercoupe	2	1 Continental	85	120	110	1,400	30 0	20 9
Luscombe A. Corp.	Silvaire 8F	2	1 Continental	90	128	115	1,400	35 0	20 0
	Silvaire Sedan	4	1 Continental	165	145	130	2,280	38 0	23 6
Piper A. Corp.	Cub PA-11	2	1 Continental	65	100	87	1,220	35 2½	22 4
	Family Cruiser PA-14	4	1 Lycoming	108	123	110	1,850	35 5½	23 2½
Ryan Aero. Co.	Navion	4	1 Continental	185	157	150	2,750	33 4½	27 3
Texas Engrg. Mfg. Co.	Swift 125	2	1 Continental	125	150	140	1,710	29 4	20 10
Military, Experimental									
Bell A. Corp.	X-1	1	1 Reaction motor	6,000 lb.	1,000+	...	13,069	28 0	31 0
Boeing Airplane Co.	B-47	3	6 GE-Al. J-35	4,000 lb.	600+	...	125,000	116 0	108 0
	B-50	11	4 P & W R-4360	3,500	400	300	120,000	141 3	99 0
	L-15	2	1 Lycoming	130	112	101	2,100	40 0	26 1
	C-97	142	4 P & W R-4360	3,500	300+	...	130,000	141 2	110 3
Consolidated Vultee A. Corp.	B-36	21	6 P & W R-4360	3,500	300+	...	278,000	230 0	163 0
	L-13	2	1 Franklin	245	115	92	2,900	40 6	31 9
Douglas A. C.	AD-1	1	1 Wright R-3350	2,500	300+	...	15,929	50 0	39 4
	D-558-2	1	Composite*	...	650+	...	...	25 0	45 0
Fairchild E. & A. Corp.	C-119	45	2 P & W R-4360	3,250	266	...	64,000	109 0	86 0
Grumman Aircraft Engr. Corp.	F8F-1	1	1 P & W R-2800	2,100	420+	...	9,583	35 6	28 3
	F9F-2	1	1 P & W Wene	5,000 lb.	600+	...	...	...	...
Lockheed A. Corp.	F-80C	1	1 GE-Al. J-33	4,000 lb.	600	...	9,600	39 0	34 6
	P2V-2	7	2 Wright R-3350	2,500	303	170	45,000	100 0	78 2¾
G. L. Martin Co.	AM-1	1	1 P & W R-4360	3,000	350+	...	21,000	50 1	41 6
	XB-48	3	6 GE-Al. J-35	4,000 lb.	480+	...	102,600	108 4	85 9
	P4M-1	10	Composite*	...	398	...	78,000+	114 0	82 7
	PBM-5A	9	2 P & W R-2800	2,100	180+	...	60,300	118 0	80 0
McDonnell A. Corp.	F-85	1	1 We J-34	3,000 lb.	660	...	5,000	21 0	15 0
	F-88	1	2 We J-34	3,000+ lb.	720+	...	15,000	40 0	55 0
	FH-1	1	2 We 19-B	1,650 lb.	500+	...	10,000	42 0	37 3
	F2H-1	1	2 We 24-C	3,000 lb.	600+	...	14,000	41 7	40 0
North American Aviation, Inc.	B-45	4	4 GE-Al. J-35	4,000 lb.	500+	...	82,600	89 6	74 0
	F-86A	1	1 GE-Al. J-35	4,000 lb.	700+	...	13,715	37 0	37 0
	FJ-1	1	1 GE-Al. J-35	4,000 lb.	600+	...	12,697	38 1	33 7
	XAJ-1	2	Composite†	...	450	...	55,000	...	...
Northrop A. C.	B-35	21	4 P & W R-4360	3,000	350+	...	164,000	172 0	53 1
	B-49	21	8 GE-Al. J-35	4,000 lb.	500+	...	213,000	172 0	53 1
	C-125†	2	3 Wright	800	175	150	27,500	87 0	66 6
	F-89	2	2 GE-Al. J-35	4,000 lb.	550+	...	30,000	50 0	50 0
	X-4	1	2 We 19XB	1,600 lb.	600+	...	7,000	25 0	20 0
Republic Aviation Corp.	F-84	1	1 GE-Al. J-35	4,000 lb.	600+	...	13,400	36 5	37 3
United A. Corp.-Vought Div.	F4U-5	1	1 P & W R-2800	2,100	450+	...	...	40 11	34 6
	F6U-1	1	1 We 24-C	3,000	600	...	...	30 2	32 0

NOTES: Power of jet and rocket engines is measured in pounds of thrust of gases out the tailpipe. At 375 mph., one pound of thrust is equal to one horsepower.

Engine symbols—P & W: Pratt & Whitney division of United Aircraft Corp.

GE-Al.: General Electric Co. originally developed these engines. Further development and production is in the hands of Allison division of General Motors Corp.

We: Westinghouse Electric Corp.

*2 nacelles, each with 1 P & W R-4360 of 3,000 hp. and 1 GE-Al. of 4,000 lb. thrust.

†2 P & W R-4360 of 3,500 hp. and 1 GE-Al. J-35 of 4,000 lb. thrust.

‡Specifications tentative pending redesign.

§1 Westinghouse 24-C turbojet engine and 1 Reaction Motors rocket engine.

Types of Airline Accidents by Percentages

Type	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947
Landing.....	29	43	58	52	45	29	21	36	48	48
Take-off (including taxi)....	32	30	21	12	23	25	38	26	16	9
Collision.....	6	3	11	18	16	8	17	21	18	9
Forced landing.....	9	6	5	3	0	17	0	5	9	17
Spin or stall.....	0	0	0	6	0	0	3	0	0	0
Other.....	24	18	5	9	16	21	21	12	9	17

Causes of Airline Accidents by Percentages

Cause	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947
Personnel errors.....	40	42	54	56	41	35	51	50	39	29
Power plant failure.....	12	7	6	2	6	12	0	5	13	11
Structural failure.....	18	6	17	17	11	12	7	12	0	5
Weather.....	18	9	12	9	12	20	21	16	25	29
Terrain.....	12	24	7	8	14	13	10	3	0	0
Other.....	0	12	4	8	16	8	11	14	23	26

Domestic and Territorial Air Carrier Operations, 1937-47

Source: Civil Aeronautics Board.

Year	Operating companies	Aircraft in service	Average available seats	Passengers carried*	Total route mileage (unduplicated)	Average speed, MPH	Revenue miles flown, all services	Total revenue	Total personnel
1937.....	19	282	12.51	1,130,338	31,084	153	66,780,935		7,586
1938.....	20	253	13.61	1,379,231	35,492	153	69,093,702	\$ 42,844,721	9,043
1939.....	19	265	14.63	1,909,880	35,213	153	83,233,621	55,947,766	10,648
1940.....	18	358	16.53	3,016,108	41,054	155	110,513,671	76,863,643	15,959
1941.....	19	359	17.42	4,145,180	41,915	159	134,916,960	97,311,134	19,223
1942.....	18	179	17.62	3,664,434	36,442	159	111,774,679	108,131,302	26,858
1943.....	18	194	17.61	3,600,364	36,982	160	105,451,414	123,104,965	29,654
1944.....	18	279	17.55	4,835,894	40,392	162	138,840,165	160,928,225	31,198
1945.....	20	421	19.68	7,793,875	51,714	156	208,969,279	214,743,090	50,313
1946.....	20	659	25.26	14,089,675	60,056	161	309,580,439	316,173,171	69,127
1947.....	32	964	31.04	14,248,834	158,098	188	411,526,371	572,792,000	86,121

*Includes revenue and nonrevenue passengers.

America's Warplane Production Record

Source: Civil Aeronautics Authority.

Type	1940	1941	1942	1943	1944	1945 (to Aug. 31)	Total Jan. 1940-Aug. 1945
Total all types.....	6,019	19,433	47,836	85,898	96,318	46,080	301,584
Bombers.....	1,191	4,115	12,627	29,355	35,003	16,140	98,431
Fighters.....	1,685	4,416	10,769	23,988	38,873	20,977	100,708
Photographic and reconnaissance.....	121	727	1,478	734	259	421	3,730
Transport.....	290	532	1,984	7,012	9,834	4,426	24,078
Trainer.....	2,731	9,373	17,631	19,939	7,577	1,309	58,560
Other*.....	1	270	3,357	4,870	4,772	2,807	16,077

*Includes special purpose, rotary wing, and liaison aircraft.

Peacetime Production Record

Year	Military	Personal	Transport	Total
1946.....	1,330	34,407	467	36,204
1947.....	2,102	15,338	278	17,718

CALENDAR AND ASTRONOMY

Edited by

CLYDE FISHER, Ph.D., LL.D., Honorary Curator, Hayden Planetarium

Associate Editor

HUGH S. RICE, A.M., Research Associate, Hayden Planetarium



Kinds of Time

Of the three main kinds of time (sidereal, apparent solar, and mean solar), the two kinds used in our calendar pages (local civil and standard time) are both types of mean solar time.

Sidereal time is used mostly in astronomy. It is nearly but not exactly star-time, and is measured by the diurnal rotation of the vernal equinox point in the sky. Sidereal days are shorter than solar days by about $3^m 56^s$ of mean time.

Apparent solar time is measured by the apparent diurnal rotation of the sun, and is the hour-angle of the sun $+12^h$. When the sun is at lower transit we have 0^h by apparent time; when it is on the upper meridian the apparent time is 12^h . The sun is not a good timekeeper, its eastward motion along the ecliptic being irregular, so apparent days are of unequal duration.

Mean solar time is the hour-angle of the "mean sun" $+12^h$. The mean sun is an imaginary body moving uniformly along the celestial equator. When the mean sun is on the lower meridian, the mean time is 0^h . The actual sun is sometimes ahead of and sometimes behind the mean sun, and the difference at any moment is the *equation of time*. When the sun is west of the mean sun, we have the "sun fast" situation, and the sun crosses the meridian before the mean sun; when the sun is east of the mean sun, we have the "sun slow" condition, and the sun transits after the mean sun. The equation of time helps in conversion of apparent and mean solar time. No clock runs on apparent time but ordinary clocks keep mean solar time in some form.

Local civil time (L.C.T.) is the mean solar time of a designated meridian, and its day begins with the mean sun at lower transit. This is midnight, the moment of *zero hour* (0^h). Ordinary clocks are not

set to local civil time, because this time—at any instant—varies with any change of longitude.

Standard time is the local civil time of a standard meridian, but used over an entire time-zone. In the U. S. the four zones (Eastern, Central, Mountain, and Pacific) are based upon the standard meridians of 75° , 90° , 105° , and 120° respectively. Ordinary clocks run on standard time, a type of mean solar time. In the summer, in certain localities, they run on advanced time (as daylight saving time) but this is only a clock-setting, and is actually standard time. Daylight saving time for a certain zone is the normal standard time of one zone to the east. While popular in certain metropolitan areas, it is not used for scientific observations. Advanced time is 1^h later on the clock-face than the normal standard time of the same zone.

Time zones. The time-zone chart of the world [inside back cover] shows how the world is divided into 24 time zones according to longitude. In a large proportion of countries, standard time is in use, and commonly the time on the clock-face reads 1 hour later for each zone east of a given zone, and 1 hour earlier for each zone west of a given zone. The zero zone [see bottom of chart] runs thru Greenwich, Eng., and the zones are so marked that the standard time at a particular station, added algebraically to the zone-number at the bottom gives the corresponding universal time or Greenwich civil time. For example, 3 a.m., M.S.T. $+7^h = 10^h$ U.T. or G.C.T.

Mexico, except for the northern part or Lower California, uses 90th-meridian time entirely. Canada uses the 4 standard-time zones of the U.S., and two others: (1) 60th-meridian or Atlantic standard time, for New Brunswick, Nova Scotia, and Quebec (east of 68° w.), 4^h earlier than Greenwich,

and (2) 135th-meridian or Yukon standard time, 9^h earlier than Greenwich. Newfoundland and the Labrador coast use Newfoundland standard time, 3^h 30^m earlier than Greenwich. Alaska uses 4 time-zones, those based on the following meridians of west longitude: 120° (Juneau), 135° or Yukon standard time (Yakutat), 150° or Alaska standard time (Fairbanks), and 165° (Nome).

The Date-line. At any moment of time, usually there are parts of two different but contiguous days going on at different places on the earth. The change of date is made at the date-line, an imaginary line that follows essentially the course of the 180° meridian in the Pacific Ocean. At points east of the date-line the calendar day is 1

day earlier than at places to the west of the line. At a point just west of the date-line, let us suppose it is 18^h or 6 p.m., L. C.T., on Aug. 1. At the same moment it is 12^h at long. 90° e., 6^h at long. 0°, and 0^h at long. 90° w., all of the same date, Aug. 1. West of long. 90° w., it is not yet 0^h (midnight); hence between 90° w. and 180° the date must be July 31. As one crosses the date-line going eastward his watch remains the same but the date changes abruptly to 1 day earlier, so the traveler repeats part of a calendar day. As one crosses the line going westward the date changes abruptly to one day later, causing him to omit a calendar day. (According to actual practice, the change is made at night regardless of the true moment of crossing.)

On Using the Following Calendar Pages

Sun fast and sun slow. This is the *equation of time*, as previously discussed.

Sunrise and sunset. For accurate results, two corrections to the tabular values are necessary: (1) interpolation for latitude, and (2) reduction to standard time. When the observer is at a latitude between two given latitudes, he computes a time for sunrise or sunset that lies between the times shown for the given latitudes. (Our table of longitudes and latitudes is a guide for one's position, but a large atlas may be consulted.) For example, on Jan. 10 the sun rises at 6:57 at lat. 30° and at 7:09 at lat. 35°, the difference being +12^m. An observer at Brierfield, Ala. (lat. 33° 2') would be about $\frac{2}{5}$ the distance between 30° and 35°. ($\frac{2}{5}$ (12^m) = 7^m appr.; hence at Brierfield sunrise occurs at 6:57 + 7^m = 7:04 a.m., L.C.T. [New York City is essentially $\frac{1}{6}$ the distance between 40° and 45°, Detroit about 7/15, Salt Lake City 3/20, etc.]

In the sun and moon tables, the data has to be given in LOCAL CIVIL TIME. This is *not* standard time, but has to be reduced to standard time.

To reduce local civil time to standard time, decrease the L.C.T. by 4^m for every degree the station is east of the standard meridian, or increase the L.C.T. by 4^m for every degree the station is west of the standard meridian.

Moonrise and moonset. For accurate results at any station in the U. S., three corrections are needed: (1) interpolation for latitude, (2) correction for longitudes west of 82½°, and (3) reduction to standard time.

(1) Interpolation for latitude follows the same method as for the sun.

(2) Use of the *a-factor*. The moon tables are exact for the given latitudes and for longitude 75° w. The *a-factor* adapts them to any longitude in the U. S. For observers in the eastern states and as far west as long. 82½° [Port Huron, Mich., Mans-

field, Ohio, Huntington, W. Va., Asheville, N. C., Tampa, Fla.], no *a-factor* is used. For stations in the 90° zone, between 82½° and 97½°, use the *a-factor* in the column "90°". The "*a-factor*, moonrise" is always to be added to the time of moonrise as derived from the main tables, and the "*a-factor*, moonset" is added to the time of moonset as derived. The boundary at 97½° between the 90° and the 105° zones, runs through Grafton, N. Dak., Webster, S. Dak., Norfolk, Nebr., Salina, Kans., Oklahoma City, Okla., Fort Worth and Corpus Christi, Tex. Observers in the 105° zone, between 97½° and 112½° long., will use the "105°" *a-factor*, and those west of 112½° will use the "120°" *a-factor*, the eastern boundary (112½°) of the 120° zone going through Butte, Mont., Pocatello, Idaho, Panguitch, Utah, and Prescott, Ariz. These zones do *not* correspond to the irregular divisions of the standard-time belts.

(3) Change L.C.T. to standard time.

Example: find moonrise on Nov. 7, 1949, at Buffalo, Wyo. (long. 106° 41' w., lat. 44° 21' n.) (a) Moonrise for 40° is 5:41 p.m., for 45°, 5:21 p.m.; the difference is -20^m. Buffalo is 17/20 the distance from 40° to 45°; we have 17/20 x -20^m = -17^m; and 5:41 - 17^m = 5:24 p.m. (b) Add *a-factor*, moonrise, for the 105° region: 5:24 + 3^m = 5:27 p.m., L.C.T. (c) Reduce to standard time: 106° 7' - 105° = 1° 7'; hence Buffalo is 1° 7' west of the standard meridian; 1.7(4^m) = 6^m.8 or 7^m; 5:27 + 7^m = 5:34 p.m., M.S.T.

Moon's transitt. This data indicates the local civil time of the moon crossing the observer's meridian. The time is the same for all latitudes. It is nearly correct for all longitudes in the U. S.; for more exact work use—for every day—a mean *a-factor* of 2^m, 4^m, 6^m. That is, for the 75° zone, use no correction; for the 90° zone add 2^m to the time in the tables; for the 105° zone add 4^m; for the 120° zone add 6^m. Afterward, reduce the L.C.T. to standard time

JANUARY

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Jan.	Sun slow	LOCAL CIVIL TIME Latitude 30° n.			LOCAL CIVIL TIME Latitude 35° n.			LOCAL CIVIL TIME Latitude 40° n.			LOCAL CIVIL TIME Latitude 45° n.			Moon's upper transit
		a- factor, moonrise	Sun- rise	Moon- set	Sun- rise	Moon- set	Sun- rise	Moon- set	Sun- rise	Moon- set	Sun- rise	Moon- set		
													90°	
1 Sat.	m s	m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	
2 Sun.	3 28	3	6 56	8 55	7 8	4 59	7 9	7 22	4 45	9 23	6 55	7 38	2 6	
3 Mon.	3 56	4	6 56	9 32	7 8	5 0	8 9	7 22	4 46	9 55	7 59	7 39	2 53	
4 Tue.	4 24	1	6 56	10 4	7 8	5 1	10 11	7 22	4 47	10 21	9 0	7 39	2 53	
5 Wed.	4 52	1	6 57	10 32	7 9	5 2	10 9	7 22	4 48	10 43	10 0	7 38	3 37	
6 Thu.	5 20	2	6 57	10 58	7 9	5 2	11 1	7 22	4 49	11 4	11 0	7 38	4 18	
7 Fri.	5 46	1	6 57	11 24	7 9	5 3	11 57	7 22	4 50	11 23	11 58	7 38	4 57	
8 Sat.	6 13	2	6 57	11 51	7 9	5 4	12 17	7 22	4 50	11 44	12 0	7 38	5 36	
9 Sun.	6 39	1	6 57	12 19	7 9	5 5	12 48	7 22	4 51	12 6	12 31	7 38	6 16	
10 Mon.	7 4	2	6 57	12 50	7 9	5 6	13 41	7 22	4 52	12 31	2 2	7 38	6 58	
11 Tue.	7 29	3	6 57	1 27	7 9	5 7	1 14	7 22	4 54	1 0	3 7	7 37	7 43	
12 Wed.	7 53	4	6 57	2 9	7 9	5 8	1 55	7 22	4 55	1 39	4 16	7 37	8 33	
13 Thu.	8 16	5	6 57	2 31	7 9	5 8	2 45	7 22	4 56	2 27	5 25	7 37	9 28	
14 Fri.	8 39	6	6 57	3 0	7 8	5 9	3 45	7 21	4 57	3 28	6 30	7 36	10 27	
15 Sat.	9 1	7	6 57	3 52	7 8	5 10	4 54	7 21	4 58	4 36	7 29	7 36	11 29	
16 Sun.	9 23	8	6 57	4 20	7 8	5 11	6 8	7 20	4 59	5 58	8 18	7 35	12 31	
17 Mon.	9 44	9	6 57	4 58	7 8	5 12	7 22	7 20	5 0	7 12	8 57	7 35	1 32	
18 Tue.	10 4	10	6 57	5 24	7 8	5 13	8 36	7 20	5 0	8 30	9 30	7 34	2 44	
19 Wed.	10 24	11	6 56	5 55	7 7	5 14	9 47	7 19	5 2	9 45	9 58	7 34	3 4	
20 Thu.	10 43	12	6 56	6 26	7 7	5 15	10 56	7 18	5 3	10 58	10 24	7 33	4 46	
21 Fri.	11 1	13	6 56	6 58	7 6	5 16	11 24	7 15	5 4	11 30	10 48	7 32	5 48	
22 Sat.	11 18	14	6 56	7 30	7 6	5 17	0 4	7 18	5 6	0 10	11 15	7 31	6 59	
23 Sun.	11 35	15	6 55	8 0	7 6	5 18	1 12	7 17	5 7	1 22	11 43	7 31	8 11	
24 Mon.	11 51	16	6 55	8 31	7 5	5 19	2 20	7 16	5 8	2 34	12 16	7 30	9 24	
25 Tue.	12 6	17	6 55	9 0	7 4	5 20	3 28	7 15	5 9	3 44	12 58	7 29	10 36	
26 Wed.	12 20	18	6 54	9 31	7 4	5 21	4 31	7 15	5 10	4 50	1 43	7 28	11 48	
27 Thu.	12 34	19	6 54	10 0	7 4	5 22	5 30	7 14	5 12	5 49	2 38	7 27	1 20	
28 Fri.	12 47	20	6 53	10 31	7 3	5 23	6 21	7 14	5 13	6 21	3 39	7 26	2 15	
29 Sat.	12 59	21	6 53	11 0	7 2	5 24	7 5	7 13	5 14	7 20	4 43	7 25	3 18	
30 Sun.	13 11	22	6 52	11 31	7 2	5 25	7 42	7 12	5 15	7 55	5 47	7 24	4 24	
31 Mon.	13 21	23	6 52	12 0	7 1	5 26	8 13	6 59	5 16	8 22	6 50	7 23	5 32	
	13 30	24	6 51	12 31	7 0	5 27	8 39	7 56	5 17	8 46	7 50	7 22	6 39	
		25											7 44	
		26											8 55	
		27											2 14	
		28											3	
		29											5 6	
		30											7 22	
		31											7 44	

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FEBRUARY 1949																			Moon's phases	E.S.T. d h m p o c u 19 7 43 27 3 55	C.S.T. d h m p o c u 19 6 48 27 2 55	M.S.T. d h m p o c u 19 5 43 27 1 55	P.S.T. d h m p o c u 19 4 43 27 12 55																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
Feb.	Sun slow	LOCAL CIVIL TIME Latitude 30° n.			LOCAL CIVIL TIME Latitude 35° n.			LOCAL CIVIL TIME Latitude 40° n.			LOCAL CIVIL TIME Latitude 45° n.			Moon's upper transit	a- factor, moonset																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
		a- factor, moonrise	Sun- rise	Moon- rise	Sun- set	Moon- set	Sun- rise	Moon- rise	Sun- set	Moon- set	Sun- rise	Moon- rise	Sun- set			Moon- set																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
		90°	105°	120°	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m

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LOCAL CIVIL TIME Latitude 30° n.				LOCAL CIVIL TIME Latitude 35° n.				LOCAL CIVIL TIME Latitude 40° n.				LOCAL CIVIL TIME Latitude 45° n.				Moon's upper transit	a- factor, moonset
Sun slow	Mar.	a- factor, moonrise		Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set		
		90°	105° 120°	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m			h m	90° 105° 120°
1 Tue.	12 33	1	2	6 27	5 59	7 29	7 41	6 30	5 55	7 31	7 41	6 34	5 47	7 34	7 41	1 32	m
2 Wed.	12 21	1	2	6 26	6 0	7 54	8 34	6 29	5 56	7 53	8 37	6 33	5 48	7 50	8 44	2 11	m
3 Thu.	12 9	1	2	6 25	6 0	8 21	9 27	6 28	5 57	8 16	9 33	6 32	5 49	8 7	9 48	2 50	m
4 Fri.	11 57	1	2	6 23	6 1	8 48	10 23	6 27	5 58	8 42	10 31	6 30	5 51	8 24	10 54	3 32	m
5 Sat.	11 43	1	2	6 22	6 2	9 19	11 20	6 25	5 59	9 10	11 32	6 28	5 52	8 45		3 32	m
6 Sun.	11 30	1	3	6 21	6 2	9 55		6 24	6 0	9 43		6 27	5 57	9 28		5 4	m
7 Mon.	11 16	2	4	6 20	6 3	10 37	0 21	6 22	6 0	10 23	0 35	6 25	5 58	10 51	0 2	5 4	m
8 Tue.	11 1	2	5	6 19	6 4	11 27	1 22	6 21	6 1	11 11	1 38	6 24	5 59	11 56	1 11	5 47	m
9 Wed.	10 46	3	5	6 18	6 4	12 24	2 22	6 20	6 2	12 9	2 39	6 22	5 57	12 49	1 26	5 57	m
10 Thu.	10 31	3	6	6 17	6 5	1 30	3 19	6 19	6 3	1 15	3 35	6 21	5 56	13 35	2 45	5 58	m
11 Fri.	10 15	3	7	6 16	6 5	2 40	4 11	6 17	6 4	2 27	4 24	6 19	5 54	14 26	3 58	6 02	m
12 Sat.	9 59	3	7	6 14	6 6	3 52	5 27	6 16	6 5	3 43	5 7	6 18	5 52	15 19	5 11	6 19	m
13 Sun.	9 43	3	7	6 13	6 7	5 4	6 13	6 14	6 5	4 58	5 44	6 16	5 46	16 11	6 22	6 33	m
14 Mon.	9 26	3	7	6 12	6 7	6 15	6 13	6 13	6 6	6 12	6 16	6 14	5 40	17 4	6 36	6 46	m
15 Tue.	9 10	3	6	6 11	6 8	7 25	6 48	6 12	6 7	7 26	6 47	6 13	5 34	18 31	6 47	6 57	m
16 Wed.	8 52	3	6	6 10	6 8	8 34	7 22	6 10	6 8	8 40	7 18	6 11	5 25	19 18	6 58	7 08	m
17 Thu.	8 35	3	6	6 8	6 9	9 44	7 58	6 9	6 9	9 53	7 50	6 10	5 16	20 6	7 09	7 19	m
18 Fri.	8 18	3	6	6 7	6 10	10 53	9 20	6 8	6 8	10 11	8 26	6 8	5 0	21 5	7 20	7 30	m
19 Sat.	8 0	3	6	6 6	6 10		8 20	6 6	6 6	10 11	8 26	6 8	4 51	22 42	7 31	7 41	m
20 Sun.	7 42	3	6	6 5	6 11	0 0	10 8	6 5	6 5	10 16	9 53	6 5	4 42	23 34	7 42	7 52	m
21 Mon.	7 24	2	5	6 4	6 12	1 3	11 2	6 3	6 12	1 19	10 45	6 3	4 33	24 26	7 53	8 03	m
22 Tue.	7 6	2	4	6 3	6 13	2 0	11 59	6 2	6 13	2 16	11 43	6 1	4 24	25 18	8 04	8 14	m
23 Wed.	6 48	2	3	6 1	6 13	2 49	12 58	6 0	6 14	3 3	12 44	6 0	4 15	26 10	8 15	8 25	m
24 Thu.	6 30	1	3	6 0	6 14	3 32	1 57	5 59	6 14	3 44	1 44	5 58	4 0	27 2	8 26	8 36	m
25 Fri.	6 12	1	2	5 59	6 14	4 8	2 55	5 58	6 15	4 18	2 44	5 57	3 51	28 14	8 37	8 47	m
26 Sat.	5 54	1	2	5 57	6 15	4 39	3 50	5 56	6 16	4 47	2 43	5 55	3 42	29 6	8 48	8 58	m
27 Sun.	5 35	1	2	5 56	6 15	5 7	4 44	5 55	6 17	5 12	2 40	5 53	3 33	30 18	8 59	9 09	m
28 Mon.	5 17	1	2	5 55	6 16	5 33	4 37	5 54	6 18	5 36	2 35	5 52	3 24	31 10	9 10	9 20	m
29 Tue.	4 59	1	2	5 54	6 17	5 59	4 29	5 52	6 18	5 59	2 30	5 50	3 15	32 2	9 21	9 31	m
30 Wed.	4 41	1	2	5 53	6 17	6 25	4 22	5 51	6 19	6 21	2 25	5 48	3 0	33 14	9 32	9 42	m
31 Thu.	4 23	1	2	5 51	6 18	6 52	4 18	5 49	6 20	6 45	2 20	5 47	2 51	34 26	9 43	9 53	m

Moon's
phasesE.S.T.
d h m○ 14 2 3
● 21 8 10

○ 29 10 11

C.S.T.
d h m○ 14 1 3
● 21 7 10

○ 29 9 11

M.S.T.
d h m○ 14 12 3
● 21 6 10

○ 29 8 11

P.S.T.
d h m○ 7 4 42
● 14 11 3○ 21 5 10
● 29 7 11

APRIL 1949

Moon's
phases

E.S.T.

d h m

D O 12 11 8

C 19 10 27

● 28 3 2

C.S.T.

d h m

D O 12 10 8

C 19 9 27

● 28 2 2

M.S.T.

d h m

D O 12 9 8

C 19 8 27

● 28 1 2

P.S.T.

d h m

D O 12 8 8

C 19 7 27

● 28 0 2

Apr.	Sun slow	LOCAL CIVIL TIME Latitude 30° n.			LOCAL CIVIL TIME Latitude 40° n.			LOCAL CIVIL TIME Latitude 45° n.			a- factor, moonset		
		Sun rise	Moon rise	Moon set	Sun rise	Moon rise	Moon set	Sun rise	Moon rise	Moon set	Moon's upper transit	50°	105° 120°
1 Fri.	4 5	5 50	6 18	7 22	5 48	6 21	7 12	5 45	6 24	7 2	5 42	6 27	7 14
2 Sat.	3 47	5 49	6 18	7 55	5 46	6 22	7 43	5 44	6 24	7 30	5 40	6 28	7 14
3 Sun.	3 29	5 48	6 20	8 34	5 45	6 22	8 4	5 42	6 26	8 4	5 38	6 29	7 45
4 Mon.	3 11	5 47	6 20	9 21	5 44	6 23	9 5	5 40	6 26	8 46	5 36	6 31	8 24
5 Tue.	2 54	5 45	6 21	10 14	5 42	6 24	9 57	5 39	6 28	9 38	5 34	6 32	9 15
6 Wed.	2 36	5 44	6 21	11 15	5 41	6 25	10 59	5 37	6 29	10 40	5 33	6 33	10 18
7 Thu.	2 19	5 43	6 22	12 21	5 40	6 25	12 7	5 36	6 30	11 51	5 31	6 34	11 31
8 Fri.	2 2	5 42	6 23	1 30	5 38	6 26	1 19	5 34	6 31	1 6	5 29	6 36	12 51
9 Sat.	1 45	5 41	6 23	2 40	5 37	6 27	2 32	5 32	6 32	2 39	5 27	6 37	2 13
10 Sun.	1 29	5 40	6 24	3 49	5 36	6 28	3 45	5 31	6 33	3 41	5 25	6 38	3 35
11 Mon.	1 12	5 38	6 24	4 59	5 34	6 29	4 58	5 29	6 34	4 58	5 24	6 40	4 58
12 Tue.	0 56	5 37	6 25	6 9	5 33	6 29	6 12	5 28	6 35	6 16	5 22	6 41	6 21
13 Wed.	0 40	5 36	6 26	7 19	5 32	6 30	7 27	5 26	6 36	7 25	5 20	6 42	7 48
14 Thu.	0 25	5 35	6 28	8 30	5 30	6 31	8 41	5 25	6 37	8 54	5 18	6 43	9 10
15 Fri.	0 10	5 34	6 27	9 41	5 29	6 32	9 55	5 23	6 38	10 11	5 16	6 45	10 31
16 Sat.	FAST	5 33	6 27	10 48	5 28	6 33	11 4	5 22	6 39	11 24	5 15	6 46	11 47
17 Sun.	0 19	5 32	6 28	11 50	5 26	6 33	12 1	5 20	6 40	12 1	5 13	6 47	12 1
18 Mon.	0 33	5 31	6 29	1 0	5 25	6 34	1 0	5 19	6 41	1 0	5 11	6 48	1 0
19 Tue.	0 47	5 30	6 30	2 0	5 24	6 35	2 0	5 17	6 42	2 0	5 10	6 50	1 41
20 Wed.	1 0	5 29	6 30	3 0	5 23	6 36	3 0	5 16	6 43	3 0	5 8	6 51	2 19
21 Thu.	1 13	5 28	6 30	4 0	5 22	6 37	4 0	5 14	6 44	4 0	5 6	6 52	3 29
22 Fri.	1 25	5 26	6 31	5 0	5 21	6 38	5 0	5 13	6 45	5 0	5 4	6 53	4 44
23 Sat.	1 37	5 25	6 32	6 0	5 20	6 39	6 0	5 12	6 46	6 0	5 3	6 54	5 59
24 Sun.	1 48	5 24	6 33	7 0	5 18	6 40	7 0	5 10	6 47	7 0	5 1	6 56	7 14
25 Mon.	1 59	5 24	6 33	8 0	5 17	6 40	8 0	5 9	6 48	8 0	5 0	6 57	8 29
26 Tue.	2 9	5 22	6 34	9 0	5 15	6 41	9 0	5 7	6 49	9 0	4 58	6 58	9 44
27 Wed.	2 19	5 21	6 34	10 0	5 14	6 42	10 0	5 6	6 50	10 0	4 56	7 0	10 59
28 Thu.	2 28	5 20	6 35	11 0	5 13	6 43	11 0	5 5	6 51	11 0	4 54	7 1	12 14
29 Fri.	2 37	5 19	6 36	12 0	5 12	6 44	12 0	5 4	6 52	12 0	4 53	7 2	13 29
30 Sat.	2 46	5 19	6 36	1 0	5 11	6 44	1 0	5 3	6 53	1 0	4 52	7 3	14 44

MAY
1949

May	LOCAL CIVIL TIME Latitude 30° n.			LOCAL CIVIL TIME Latitude 35° n.			LOCAL CIVIL TIME Latitude 40° n.			LOCAL CIVIL TIME Latitude 45° n.			Moon's upper transit	a- factor, moonset			
	Sun fast	Sun- rise	Moon- rise	Moon- set	Sun- rise	Moon- rise	Moon- set	Sun- rise	Moon- rise	Moon- set	Sun- rise	Moon- rise		Moon- set	90°	105°	120°
1 Sun.	2 53	5 18	6 37	7 13	10 8	5 10	6 45	7 3	10 24	5 1	6 54	6 45	10 43	4 50	7 5	6 23	11 6
2 Mon.	3 1	5 17	6 38	8 10	11 6	5 9	6 48	7 53	11 22	5 0	6 55	7 34	11 42	4 49	7 6	7 11	11 6
3 Tue.	3 8	5 16	6 38	9 8	11 59	5 8	6 48	8 51	.....	4 58	6 56	8 33	.....	4 47	7 8	9	0 5
4 Wed.	3 14	5 15	6 39	10 12	.....	5 7	6 47	9 56	0 15	4 57	6 57	9 40	0 32	4 46	7 8	9 19	0 53
5 Thu.	3 19	5 14	6 40	11 18	0 46	5 6	6 48	11 6	0 59	4 56	6 58	10 51	1 14	4 44	7 10	10 34	1 32
6 Fri.	3 24	5 13	6 40	12 25	1 27	5 5	6 49	12 16	1 37	4 55	6 59	12 6	1 49	4 43	7 11	11 53	2 3
7 Sat.	3 29	5 12	6 41	1 32	2 4	5 4	6 50	1 27	2 11	4 54	7 0	1 20	2 20	4 42	7 12	1 13	2 29
8 Sun.	3 33	5 12	6 41	2 39	3 18	5 3	6 50	2 37	2 42	4 52	7 1	2 35	2 46	4 40	7 13	2 33	3 50
9 Mon.	3 37	5 11	6 42	3 46	3 51	5 2	6 51	3 48	3 11	4 51	7 2	3 50	3 11	4 39	7 14	3 53	3 11
10 Tue.	3 40	5 10	6 43	4 55	3 44	5 1	6 52	5 0	3 40	4 50	7 3	5 7	3 37	4 38	7 15	5 14	3 32
11 Wed.	3 42	5 10	6 43	6 5	4 20	5 0	6 53	6 15	4 12	4 49	7 4	6 25	4 4	4 36	7 17	6 38	3 54
12 Thu.	3 44	5 9	6 44	7 17	4 59	4 59	6 54	7 29	4 48	4 48	7 5	7 44	4 36	4 35	7 18	8 2	4 22
13 Fri.	3 45	5 8	6 45	8 27	5 44	4 58	6 54	8 42	5 30	4 47	7 6	9 0	5 14	4 34	7 19	9 21	4 56
14 Sat.	3 46	5 8	6 45	9 33	6 36	4 58	6 55	9 50	6 19	4 46	7 7	10 9	6 1	4 33	7 20	10 33	5 39
15 Sun.	3 46	5 7	6 46	10 32	7 33	4 57	6 56	10 49	7 16	4 45	7 8	11 8	6 57	4 32	7 22	11 31	6 33
16 Mon.	3 45	5 6	6 46	11 26	8 34	4 56	6 57	11 38	8 17	4 44	7 9	11 55	7 59	4 30	7 23	.....	7 36
17 Tue.	3 44	5 5	6 47	.....	9 36	4 55	6 58	.....	9 21	4 44	7 10	.....	9 5	4 29	7 24	0 16	8 45
18 Wed.	3 43	5 5	6 48	0 6	10 36	4 54	6 58	0 18	10 25	4 42	7 10	0 32	10 12	4 28	7 25	0 50	9 55
19 Thu.	3 41	5 4	6 48	0 41	11 35	4 54	6 59	0 51	11 26	4 42	7 11	1 2	11 16	4 27	7 26	1 16	11 4
20 Fri.	3 38	5 4	6 49	1 12	12 30	4 53	7 0	1 19	12 25	4 41	7 12	1 28	12 17	4 26	7 27	1 37	12 9
21 Sat.	3 34	5 4	6 50	1 39	1 24	4 53	7 1	1 44	1 21	4 40	7 13	1 49	1 17	4 25	7 28	1 55	1 13
22 Sun.	3 31	5 3	6 50	2 5	2 17	4 52	7 1	2 8	2 17	4 39	7 14	2 9	2 16	4 24	7 29	2 11	2 16
23 Mon.	3 26	5 2	6 51	2 31	3 10	4 51	7 2	2 30	3 13	4 38	7 15	2 28	3 16	4 23	7 30	2 26	3 19
24 Tue.	3 21	5 2	6 52	2 58	4 4	4 51	7 3	2 53	4 10	4 38	7 16	2 48	4 17	4 23	7 31	2 43	4 24
25 Wed.	3 16	5 2	6 52	3 25	5 0	4 50	7 4	3 18	5 8	4 37	7 17	3 10	5 19	4 22	7 32	3 1	5 31
26 Thu.	3 10	5 1	6 53	3 56	5 59	4 50	7 4	3 47	6 10	4 37	7 17	3 35	6 24	4 21	7 33	3 22	6 40
27 Fri.	3 3	5 1	6 53	4 33	7 0	4 49	7 5	4 20	7 13	4 36	7 18	4 5	7 80	4 20	7 34	3 49	7 50
28 Sat.	2 56	5 0	6 54	5 15	8 1	4 49	7 6	5 1	8 17	4 35	7 19	4 43	8 85	4 19	7 35	4 23	8 57
29 Sun.	2 49	5 0	6 54	6 5	9 1	4 48	7 6	5 48	9 17	4 35	7 20	5 29	9 86	4 19	7 36	5 7	9 59
30 Mon.	2 41	5 0	6 55	7 2	9 55	4 48	7 7	6 45	10 11	4 34	7 21	6 26	10 80	4 18	7 37	6 4	10 51
31 Tue.	2 32	5 0	6 56	8 5	10 44	4 48	7 8	7 49	10 69	4 34	7 21	7 32	11 14	4 17	7 38	7 10	11 93

JUNE 1949

Moon's
phasesE.S.T.
d h m

D 3 10 27
 O 10 4 45
 C 18 7 29
 ● 26 5 2

C.S.T.
d h m

D 3 9 27
 O 10 3 45
 C 18 6 29
 ● 26 4 2

M.S.T.
d h m

D 3 8 27
 O 10 2 45
 C 18 5 29
 ● 26 3 2

P.S.T.
d h m

D 3 7 27
 O 10 1 45
 C 18 4 29
 ● 26 2 2

June	LOCAL CIVIL TIME Latitude 30° n.				LOCAL CIVIL TIME Latitude 35° n.				LOCAL CIVIL TIME Latitude 40° n.				LOCAL CIVIL TIME Latitude 45° n.				Moon's upper transit	a- factor, moonset 90° 105° 120°			
	Sun fast	Sun- rise	Moon- rise	Moon- set	Sun- rise	Moon- rise	Moon- set	Sun- rise	Moon- rise	Moon- set	Sun- rise	Moon- rise	Moon- set	Sun- set	Moon- set						
1 Wed.	m s	2 24	3 6	9 11	11 27	h m	7 8	8 58	11 38	h m	4 33	7 22	8 42	11 51	h m	4 17	7 39	8 24	h m	1 3	4
2 Thu.	2 15	3 6	9 4	10 7	12 18	4 47	7 9	10 10	11 16	4 33	7 23	7 23	9 55	11 51	4 16	7 40	9 42	0 6	1 2	3	4
3 Fri.	2 5	3 6	9 4	10 7	12 18	4 47	7 9	10 10	11 16	4 32	7 24	7 24	11 9	0 22	4 16	7 40	11 0	0 33	6 6	1 2	3
4 Sat.	1 55	3 6	9 4	10 7	12 18	4 46	7 10	12 25	0 44	4 32	7 24	7 24	12 22	0 49	4 15	7 41	12 18	0 55	6 54	1 2	3
5 Sun.	1 45	3 6	9 4	10 7	12 18	4 46	7 10	12 25	0 44	4 32	7 25	7 25	1 34	1 14	4 15	7 42	1 35	1 15	7 42	1 2	3
6 Mon.	1 34	3 6	9 4	10 7	12 18	4 46	7 11	12 24	1 41	4 32	7 26	7 26	2 48	1 38	4 14	7 43	2 54	1 35	8 31	1 2	3
7 Tue.	1 24	3 6	10 4	10 7	12 18	4 46	7 12	12 24	2 11	4 31	7 26	7 26	4 3	2 4	4 14	7 43	4 14	1 57	9 23	1 2	3
8 Wed.	1 13	3 6	10 4	10 7	12 18	4 46	7 13	12 23	2 44	4 31	7 27	7 27	6 38	3 8	4 13	7 44	5 36	2 50	10 18	1 3	4
9 Thu.	1 1	3 6	9 4	10 7	12 18	4 46	7 13	12 20	3 22	4 31	7 27	7 27	6 38	3 8	4 13	7 45	6 56	2 50	11 16	2 3	5
10 Fri.	0 50	3 5	8 4	10 7	12 18	4 45	7 13	12 30	4 7	4 31	7 28	7 28	7 49	3 50	4 13	7 45	8 12	3 29	.....	2 4	6
11 Sat.	0 38	2 5	7 4	10 7	12 18	4 45	7 14	12 34	5 0	4 30	7 28	7 28	8 53	4 41	4 13	7 46	9 16	4 18	0 16	2 5	7
12 Sun.	0 26	2 4	5 4	10 7	12 18	4 45	7 14	12 28	6 0	4 30	7 29	7 29	9 46	5 41	4 13	7 46	10 8	5 18	1 17	3 5	8
13 Mon.	0 14	1 3	4 4	10 7	12 18	4 45	7 14	10 49	7 5	4 30	7 28	7 28	10 28	6 54	4 12	7 47	10 17	6 26	2 15	3 6	8
14 Tue.	SLOW	1 1	2 3	4 58	7 2	4 45	7 15	10 49	8 9	4 30	7 30	7 30	11 2	7 54	4 12	7 48	11 17	7 37	3 9	3 3	6
15 Wed.	0 11	1 1	2 3	4 58	7 2	4 45	7 15	11 20	9 13	4 30	7 30	7 30	11 28	9 1	4 12	7 48	11 40	8 47	3 58	3 5	8
16 Thu.	0 24	1 2	3 3	4 58	7 2	4 45	7 16	11 46	10 13	4 30	7 31	7 31	11 51	10 5	4 12	7 48	11 59	9 56	4 43	3 5	8
17 Fri.	0 37	1 2	2 4	4 58	7 3	4 45	7 16	.....	11 11	4 30	7 31	7 31	.....	11 6	4 12	7 49	.....	11 0	5 25	3 5	7
18 Sat.	0 50	1 2	2 4	4 59	7 4	4 46	7 16	0 33	12 7	4 30	7 32	7 32	0 12	12 6	4 12	7 49	0 15	12 4	6 4	2 5	7
19 Sun.	1 3	1 2	2 4	4 59	7 4	4 46	7 16	0 33	1 3	4 30	7 32	7 32	0 12	1 5	4 12	7 50	0 31	1 7	6 43	2 5	7
20 Mon.	1 16	1 2	3 4	4 59	7 4	4 46	7 17	0 55	1 59	4 31	7 32	7 32	0 51	2 5	4 13	7 50	0 48	2 11	7 23	3 5	8
21 Tue.	1 29	1 2	3 4	4 59	7 4	4 46	7 17	1 19	2 57	4 31	7 32	7 32	1 13	3 6	4 13	7 50	1 5	3 17	8 4	3 5	8
22 Wed.	1 42	1 2	3 4	4 59	7 4	4 46	7 17	1 46	3 58	4 31	7 32	7 32	1 37	4 10	4 13	7 50	1 25	4 25	8 47	3 5	8
23 Thu.	1 55	1 3	4 5	5 0	7 4	4 47	7 18	2 17	5 0	4 31	7 32	7 32	2 5	5 16	4 13	7 50	1 49	5 55	9 35	3 5	8
24 Fri.	2 8	2 3	5 4	5 0	7 4	4 47	7 18	2 55	6 4	4 32	7 33	7 33	2 40	6 22	4 14	7 50	2 20	6 44	10 26	3 5	8
25 Sat.	2 21	2 4	6 5	5 0	7 5	4 47	7 18	3 41	7 6	4 32	7 33	7 33	3 23	7 25	4 14	7 51	3 0	7 49	11 22	2 5	7
26 Sun.	2 34	3 5	8 5	5 0	7 5	4 47	7 18	4 36	8 4	4 32	7 33	7 33	4 17	8 23	4 14	7 51	3 53	8 45	12 21	2 4	6
27 Mon.	2 46	3 6	9 5	5 0	7 5	4 48	7 18	5 38	8 54	4 33	7 33	7 33	5 21	9 12	4 15	7 51	4 58	9 32	1 20	2 3	5
28 Tue.	2 59	3 6	9 5	5 1	7 5	4 48	7 18	6 47	9 38	4 33	7 33	7 33	6 12	9 52	4 15	7 51	6 12	10 8	2 17	1 3	4
29 Wed.	3 11	3 6	9 5	5 1	7 5	4 48	7 18	7 58	10 15	4 33	7 33	7 33	7 46	10 25	4 16	7 50	7 31	10 36	3 12	1 2	3
30 Thu.	3 23	3 6	9 5	5 2	7 5	4 49	7 18	9 9	10 46	4 34	7 33	7 33	9 0	10 52	4 16	7 50	8 50	11 0	4 8	1 2	3

JULY

1949

Moon's
phasesE.S.T.
d h m

○ 3 3 8
○ 10 2 41
○ 18 1 1
● 25 2 23

C.S.T.
d h m

○ 3 2 8
○ 10 1 41
○ 18 0 1
● 25 1 33

M.S.T.
d h m

○ 3 1 8
○ 10 0 41
○ 17 11 1
● 25 12 33

P.S.T.
d h m

○ 3 0 8
○ 9 11 41
○ 17 10 1
● 25 11 33

July	Sun slow	LOCAL CIVIL TIME Latitude 30° n.				LOCAL CIVIL TIME Latitude 35° n.				LOCAL CIVIL TIME Latitude 40° n.				LOCAL CIVIL TIME Latitude 45° n.				Moon's upper transit	a- factor, moonset	
		Sun		Moon		Sun		Moon		Sun		Moon		Sun		Moon				
		rise	set	rise	set	rise	set	rise	set	rise	set	rise	set	rise	set	rise	set			
		90°	105°	120°																
1 Fri.	m s	3 35	5 2	7 5	10 22	7 18	10 18	7 18	10 18	7 33	10 13	7 33	10 13	7 50	10 8	7 50	10 8	h m	h m	m
2 Sat.	3 47	3 6	9 9	5 2	11 14	4 49	7 18	10 18	11 16	4 34	7 33	11 16	11 18	4 16	7 50	10 8	11 21	4 52	5 2	3
3 Sun.	3 58	3 6	9 9	5 2	11 45	4 50	7 18	11 26	11 44	4 35	7 33	11 26	11 42	4 17	7 50	10 8	11 40	5 40	5 40	3
4 Mon.	4 9	3 6	9 9	5 3	12 32	4 50	7 18	12 34	4 35	7 32	12 38	4 35	7 32	4 18	7 50	12 42	1 1	6 28	6 28	3
5 Tue.	4 20	3 6	9 9	5 4	1 37	4 50	7 18	1 44	4 36	7 32	1 51	4 36	7 32	4 18	7 50	2 0	1 1	7 17	7 17	3
		3 6	9 9		2 43	4 51	7 18	2 54	4 40	7 32	3 6	4 40	7 32	4 19	7 50	2 0	0 23	8 10	8 10	3
6 Wed.	4 30	3 6	9 9	5 4	3 51	4 51	7 17	4 5	4 37	7 32	4 20	4 37	7 32	4 20	7 49	4 38	0 51	9 5	9 5	5
7 Thu.	4 40	3 6	8 5	5 4	5 0	4 52	7 17	5 15	4 38	7 32	5 33	4 40	7 32	4 20	7 49	5 55	1 25	10 3	10 3	6
8 Fri.	4 50	2 5	7 5	5 5	6 3	4 52	7 17	6 19	4 38	7 31	6 39	4 38	7 31	4 21	7 48	7 2	2 8	11 3	11 3	8
9 Sat.	4 59	2 4	6 5	5 5	7 4	4 53	7 16	7 17	3 46	7 31	7 36	4 39	7 31	4 22	7 48	7 59	3	.....	.....	8
10 Sun.	5 8	2 3	5 5	5 6	7 4	4 54	7 16	8 6	4 49	7 30	8 22	4 40	7 30	4 22	7 47	8 42	4 8	0 2	0 2	6
		2 3	5 5		7 51	4 54														8
11 Mon.	5 16	1 3	4 4	5 6	8 33	4 54	7 16	8 45	5 54	7 30	8 59	4 40	7 30	4 23	7 47	9 16	5 18	0 58	0 58	8
12 Tue.	5 24	1 2	3 5	5 7	9 9	4 55	7 16	9 18	6 58	7 30	9 29	4 41	7 30	4 24	7 46	9 42	6 30	1 49	1 49	8
13 Wed.	5 32	1 2	3 5	5 8	9 40	4 55	7 15	9 46	8 0	7 29	9 54	4 42	7 29	4 25	7 46	10 3	7 39	2 36	2 36	5
14 Thu.	5 39	1 2	2 5	5 8	10 7	4 56	7 15	10 11	9 0	7 28	10 15	4 42	7 28	4 26	7 45	10 20	8 47	3 19	3 19	5
15 Fri.	5 45	1 2	2 5	5 8	10 33	4 57	7 15	10 35	9 57	7 28	10 35	4 43	7 28	4 27	7 44	10 36	9 51	4 0	4 0	7
		1 2	2 5																	5
16 Sat.	5 51	1 2	2 5	5 9	10 59	4 57	7 14	10 57	10 53	7 28	10 54	4 44	7 28	4 28	7 44	10 52	10 54	4 39	4 39	7
17 Sun.	5 57	1 2	3 5	5 10	11 26	4 58	7 14	11 20	11 49	7 27	11 15	4 44	7 27	4 28	7 43	11 9	11 57	5 18	5 18	7
18 Mon.	6 2	1 2	3 5	5 10	11 53	4 59	7 13	11 46	12 46	7 26	11 37	4 45	7 26	4 29	7 42	11 26	1 2	5 58	5 58	7
19 Tue.	6 6	1 2	4 5	5 11	12 20	4 59	7 12	12 12	1 45	7 25	12 0	4 46	7 25	4 30	7 41	11 49	2 8	6 40	6 40	8
20 Wed.	6 10	1 3	4 5	5 11	12 47	5 0	7 12	12 35	2 46	7 25	12 35	4 47	7 25	4 31	7 40	12 6	3 17	7 26	7 26	8
		1 3	4 5																	5
21 Thu.	6 14	2 3	5 5	5 12	1 3	5 1	7 11	1 49	3 49	7 24	1 35	4 48	7 24	4 32	7 39	1 17	4 26	8 15	8 15	8
22 Fri.	6 17	2 4	6 5	5 12	1 36	5 1	7 11	1 51	4 52	7 23	1 44	4 49	7 23	4 33	7 38	0 52	5 38	9 9	9 9	8
23 Sat.	6 19	2 5	7 5	5 13	2 38	5 35	7 10	2 22	5 52	7 23	2 3	4 50	7 23	4 36	7 38	1 40	6 34	10 7	10 7	7
24 Sun.	6 21	3 6	8 5	5 14	3 39	6 31	7 10	3 22	6 46	7 22	3 3	4 50	7 22	4 36	7 38	2 41	7 25	11 6	11 6	6
25 Mon.	6 22	3 6	9 5	5 14	4 44	7 20	7 9	4 30	7 23	7 21	4 13	4 51	7 21	4 37	7 36	3 52	8 6	12 6	12 6	5
		3 6	9 5																	3
26 Tue.	6 23	3 6	10 5	5 15	5 54	8 8	7 8	5 42	8 20	7 20	5 28	4 52	7 20	4 38	7 34	5 11	8 38	1 8	1 8	4
27 Wed.	6 23	3 6	9 5	5 15	6 57	7 3	7 8	6 55	8 47	7 18	6 45	4 53	7 18	4 39	7 33	6 33	9 4	1 57	1 57	4
28 Thu.	6 22	3 6	9 5	5 16	8 58	8 12	7 7	7 9	9 18	7 13	8 1	4 54	7 13	4 40	7 32	7 34	9 5	2 48	2 48	3
29 Fri.	6 21	3 6	9 5	5 17	9 59	9 47	7 6	9 17	9 47	7 17	9 15	4 55	7 17	4 41	7 31	9 13	9 46	3 37	3 37	2
30 Sat.	6 20	3 6	9 5	5 17	10 24	10 19	7 5	10 26	10 15	7 16	10 28	4 56	7 16	4 42	7 30	10 31	10 6	4 25	4 25	3
		3 6	9 5																	3
31 Sun.	6 17	3 6	9 5	5 13	6 54	11 30	7 4	11 36	10 46	7 15	11 42	4 56	7 15	4 43	7 29	11 50	10 28	5 15	5 15	4

AUGUST 1949

2 Tue. 3 Wed. 4 Thu. 5 Fri.	6 6 6 5 56	9 5 19 5 20 5 20 5 21	6 3 3 2	LOCAL CIVIL TIME Latitude 30° n.				LOCAL CIVIL TIME Latitude 40° n.				LOCAL CIVIL TIME Latitude 45° n.				Moon's phases	E.S.T. d h m D O C ● D
				Sun		Moon		Sun		Moon		Sun		Moon			
				rise	set	rise	set	rise	set	rise	set	rise	set	rise	set		
6 Sat. 7 Sun. 8 Mon. 9 Tue. 10 Wed.	5 50 5 43 5 36 5 28 5 19	5 21 5 22 5 23 5 23 5 24	3 3 3 2 3	LOCAL CIVIL TIME Latitude 30° n.				LOCAL CIVIL TIME Latitude 40° n.				LOCAL CIVIL TIME Latitude 45° n.				Moon's upper transit	a- factor, moonset
				m		m		m		m		m		m			
				120°		120°		120°		120°		120°		120°			
1 Mon.	6 14	5 18	6 54	12 36	6 54	12 36	6 54	12 36	6 54	12 36	6 54	12 36	6 54	12 36	6 54	12 36	
2 Tue.	6 11	5 19	6 53	12 35	6 53	12 35	6 53	12 35	6 53	12 35	6 53	12 35	6 53	12 35	6 53	12 35	
3 Wed.	6 6	5 20	6 52	12 34	6 52	12 34	6 52	12 34	6 52	12 34	6 52	12 34	6 52	12 34	6 52	12 34	
4 Thu.	6 1	5 20	6 51	12 33	6 51	12 33	6 51	12 33	6 51	12 33	6 51	12 33	6 51	12 33	6 51	12 33	
5 Fri.	5 56	5 21	6 50	12 32	6 50	12 32	6 50	12 32	6 50	12 32	6 50	12 32	6 50	12 32	6 50	12 32	
6 Sat.	5 50	5 21	6 50	12 31	6 50	12 31	6 50	12 31	6 50	12 31	6 50	12 31	6 50	12 31	6 50	12 31	
7 Sun.	5 43	5 22	6 49	12 30	6 49	12 30	6 49	12 30	6 49	12 30	6 49	12 30	6 49	12 30	6 49	12 30	
8 Mon.	5 36	5 23	6 48	12 29	6 48	12 29	6 48	12 29	6 48	12 29	6 48	12 29	6 48	12 29	6 48	12 29	
9 Tue.	5 28	5 23	6 47	12 28	6 47	12 28	6 47	12 28	6 47	12 28	6 47	12 28	6 47	12 28	6 47	12 28	
10 Wed.	5 19	5 24	6 46	12 27	6 46	12 27	6 46	12 27	6 46	12 27	6 46	12 27	6 46	12 27	6 46	12 27	
11 Thu.	5 10	5 24	6 45	12 26	6 45	12 26	6 45	12 26	6 45	12 26	6 45	12 26	6 45	12 26	6 45	12 26	
12 Fri.	5 0	5 25	6 44	12 25	6 44	12 25	6 44	12 25	6 44	12 25	6 44	12 25	6 44	12 25	6 44	12 25	
13 Sat.	4 50	5 26	6 44	12 24	6 44	12 24	6 44	12 24	6 44	12 24	6 44	12 24	6 44	12 24	6 44	12 24	
14 Sun.	4 40	5 26	6 43	12 23	6 43	12 23	6 43	12 23	6 43	12 23	6 43	12 23	6 43	12 23	6 43	12 23	
15 Mon.	4 28	5 27	6 42	12 22	6 42	12 22	6 42	12 22	6 42	12 22	6 42	12 22	6 42	12 22	6 42	12 22	
16 Tue.	4 17	5 27	6 41	12 21	6 41	12 21	6 41	12 21	6 41	12 21	6 41	12 21	6 41	12 21	6 41	12 21	
17 Wed.	4 4	5 28	6 40	12 20	6 40	12 20	6 40	12 20	6 40	12 20	6 40	12 20	6 40	12 20	6 40	12 20	
18 Thu.	3 52	5 28	6 39	12 19	6 39	12 19	6 39	12 19	6 39	12 19	6 39	12 19	6 39	12 19	6 39	12 19	
19 Fri.	3 39	5 29	6 38	12 18	6 38	12 18	6 38	12 18	6 38	12 18	6 38	12 18	6 38	12 18	6 38	12 18	
20 Sat.	3 25	5 30	6 37	12 17	6 37	12 17	6 37	12 17	6 37	12 17	6 37	12 17	6 37	12 17	6 37	12 17	
21 Sun.	3 10	5 30	6 36	12 16	6 36	12 16	6 36	12 16	6 36	12 16	6 36	12 16	6 36	12 16	6 36	12 16	
22 Mon.	2 56	5 31	6 34	12 15	6 34	12 15	6 34	12 15	6 34	12 15	6 34	12 15	6 34	12 15	6 34	12 15	
23 Tue.	2 41	5 31	6 33	12 14	6 33	12 14	6 33	12 14	6 33	12 14	6 33	12 14	6 33	12 14	6 33	12 14	
24 Wed.	2 25	5 32	6 32	12 13	6 32	12 13	6 32	12 13	6 32	12 13	6 32	12 13	6 32	12 13	6 32	12 13	
25 Thu.	2 9	5 33	6 31	12 12	6 31	12 12	6 31	12 12	6 31	12 12	6 31	12 12	6 31	12 12	6 31	12 12	
26 Fri.	1 53	5 33	6 30	12 11	6 30	12 11	6 30	12 11	6 30	12 11	6 30	12 11	6 30	12 11	6 30	12 11	
27 Sat.	1 36	5 34	6 29	12 10	6 29	12 10	6 29	12 10	6 29	12 10	6 29	12 10	6 29	12 10	6 29	12 10	
28 Sun.	1 19	5 34	6 28	12 9	6 28	12 9	6 28	12 9	6 28	12 9	6 28	12 9	6 28	12 9	6 28	12 9	
29 Mon.	1 1	5 35	6 27	12 8	6 27	12 8	6 27	12 8	6 27	12 8	6 27	12 8	6 27	12 8	6 27	12 8	
30 Tue.	0 43	5 35	6 25	12 7	6 25	12 7	6 25	12 7	6 25	12 7	6 25	12 7	6 25	12 7	6 25	12 7	
31 Wed.	0 25	5 36	6 24	12 6	6 24	12 6	6 24	12 6	6 24	12 6	6 24	12 6	6 24	12 6	6 24	12 6	

C.S.T.

d h m

C.S.T.

d h m

M.S.T.

d h m

P.S.T.

d h m

SEPTEMBER

1949

Moon's phases

E.S.T.

d h m

○ 7 4 59

○ 15 9 29

● 22 7 21

● 28 11 18

C.S.T.

d h m

○ 7 3 59

○ 15 8 29

○ 22 6 21

● 28 10 18

M.S.T.

d h m

○ 7 2 59

○ 15 7 29

○ 22 5 21

● 28 9 18

P.S.T.

d h m

○ 7 1 59

○ 15 6 29

○ 22 4 21

● 28 8 18

Sept.	Sun fast	LOCAL CIVIL TIME Latitude 30° n.			LOCAL CIVIL TIME Latitude 35° n.			LOCAL CIVIL TIME Latitude 40° n.			LOCAL CIVIL TIME Latitude 45° n.			Moon's upper transit	a-factor, moonset			
		Sun-rise	Moon-rise	Moon-set	Sun-rise	Moon-rise	Moon-set	Sun-rise	Moon-rise	Moon-set	Sun-rise	Moon-rise	Moon-set		90°	105°	120°	
1 Thu.	m 6	5 36	6 23	2 49	5 32	6 28	3 6	5 27	6 23	3 26	6 38	3 50	11 47	h m	7 48	3	5	8
2 Fri.	+0 13	5 37	6 23	3 43	5 33	6 28	3 59	5 28	6 23	4 18	6 35	3 50	11 47	h m	8 46	3	5	8
3 Sat.	0 32	5 38	6 21	4 29	5 33	6 25	4 43	5 29	6 21	4 59	6 33	3 48	11 45	h m	9 45	3	5	8
4 Sun.	0 51	5 38	6 20	5 8	5 34	6 24	5 19	5 30	6 20	5 33	6 28	3 48	11 45	h m	10 43	3	5	8
5 Mon.	1 11	5 39	6 18	5 41	5 35	6 22	5 50	5 31	6 18	6 0	6 26	3 48	11 45	h m	11 42	3	5	8
6 Tue.	1 31	5 39	6 17	6 11	5 36	6 21	6 17	5 32	6 16	6 24	6 29	3 48	11 45	h m	12 40	3	5	8
7 Wed.	1 52	5 40	6 16	6 38	5 43	6 19	6 41	5 39	6 13	6 32	6 27	3 48	11 45	h m	1 38	3	5	8
8 Thu.	2 12	5 40	6 15	7 8	5 43	6 18	7 4	5 39	6 13	7 3	6 24	3 48	11 45	h m	2 36	3	5	8
9 Fri.	2 33	5 41	6 14	7 28	5 43	6 16	7 26	5 34	6 10	7 22	6 20	3 48	11 45	h m	3 34	3	5	7
10 Sat.	2 53	5 41	6 14	7 55	5 43	6 15	7 49	5 35	6 13	7 43	6 22	3 48	11 45	h m	4 32	3	5	8
11 Sun.	3 14	5 42	6 11	8 23	5 42	6 14	8 15	5 36	6 16	8 5	6 20	3 48	11 45	h m	5 30	3	5	8
12 Mon.	3 35	5 42	6 10	8 55	5 40	6 12	8 45	5 37	6 15	8 31	6 18	3 48	11 45	h m	6 28	3	5	8
13 Tue.	3 56	5 43	6 9	9 33	5 41	6 11	9 19	5 38	6 13	9 3	6 16	3 48	11 45	h m	7 26	3	5	8
14 Wed.	4 18	5 44	6 7	10 16	5 42	6 8	10 1	5 39	6 12	9 43	6 14	3 48	11 45	h m	8 24	3	5	8
15 Thu.	4 39	5 44	6 6	11 8	5 42	6 8	10 51	5 40	6 10	10 31	6 12	3 48	11 45	h m	9 22	3	5	7
16 Fri.	5 0	5 45	6 5	11 58	5 43	6 6	11 50	5 41	6 8	11 30	6 10	3 48	11 45	h m	10 20	3	5	7
17 Sat.	5 21	5 45	6 4	0 5	5 44	6 5	12 2	5 42	6 7	12 1	6 8	3 48	11 45	h m	11 18	3	5	6
18 Sun.	5 43	5 46	6 2	1 10	5 44	6 4	0 56	5 43	6 5	0 38	6 8	3 48	11 45	h m	12 16	3	5	8
19 Mon.	6 4	5 46	6 1	2 19	5 45	6 3	1 3	5 44	6 8	1 52	6 5	3 48	11 45	h m	1 36	3	5	8
20 Tue.	6 25	5 47	6 0	3 29	5 46	6 2	2 6	5 45	6 8	2 39	6 8	3 48	11 45	h m	2 34	3	5	7
21 Wed.	6 46	5 47	5 59	4 38	5 47	5 59	4 33	5 46	6 0	3 9	6 8	3 48	11 45	h m	3 32	3	5	7
22 Thu.	7 7	5 48	5 57	5 48	5 47	5 58	5 46	5 47	5 59	4 27	6 1	3 48	11 45	h m	4 30	3	5	6
23 Fri.	7 28	5 48	5 56	6 58	5 48	5 57	5 45	5 48	5 57	5 45	6 1	3 48	11 45	h m	5 28	3	5	8
24 Sat.	7 49	5 49	5 55	8 8	5 49	5 55	8 15	5 49	5 56	8 22	6 1	3 48	11 45	h m	6 26	3	5	8
25 Sun.	8 10	5 50	5 54	9 19	5 50	5 53	9 30	5 50	5 53	9 41	6 1	3 48	11 45	h m	7 24	3	5	5
26 Mon.	8 31	5 50	5 52	10 31	5 50	5 52	10 44	5 51	5 52	10 44	6 1	3 48	11 45	h m	8 22	3	5	5
27 Tue.	8 51	5 51	5 51	11 40	5 51	5 50	11 55	5 52	5 50	12 14	6 1	3 48	11 45	h m	9 20	3	5	6
28 Wed.	9 11	5 51	5 50	12 43	5 51	5 49	1 0	5 52	5 49	1 20	6 1	3 48	11 45	h m	10 18	3	5	8
29 Thu.	9 31	5 52	5 49	1 40	5 52	5 48	1 57	5 53	5 48	2 18	6 1	3 48	11 45	h m	11 16	3	5	8
30 Fri.	9 51	5 52	5 47	2 29	5 53	5 46	2 43	5 55	5 45	3 1	6 1	3 48	11 45	h m	12 14	3	5	8

OCTOBER

1949

Moon's
phasesE.S.T.
d h mO 6 9 53
● 14 11 6
☾ 21 4 23
☾ 28 12 4C.S.T.
d h mO 6 8 52
● 14 10 6
☾ 21 3 23
☾ 28 11 4M.S.T.
d h mO 6 7 53
● 14 9 6
☾ 21 2 23
☾ 28 10 4P.S.T.
d h mO 6 6 52
● 14 8 6
☾ 21 1 23
☾ 28 9 4

Oct.	Sun fast	LOCAL CIVIL TIME Latitude 30° n.				LOCAL CIVIL TIME Latitude 35° n.				LOCAL CIVIL TIME Latitude 40° n.				LOCAL CIVIL TIME Latitude 45° n.				Moon's upper transit	a- factor, moonset	90°	105°	120°											
		Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set																
1 Sat.	10 10	m	m	m	m	5 53	5 46	h	h	5 54	5 45	h	h	5 56	5 44	h	h	5 57	5 42	h	h	5 58	5 40	h	h	5 59	5 38	h	h	8 24	3	5	8
2 Sun.	10 30	1	2	4	0 43	5 53	5 45	1 43	0 29	5 54	5 44	3 54	0 29	5 55	5 44	3 54	0 29	5 56	5 42	3 86	0 13	5 57	5 38	4 17	3	9	11	3	5	8	8		
3 Mon.	10 49	1	2	3	2 42	5 53	5 44	2 42	2 33	5 54	5 44	4 21	2 33	5 55	5 44	4 21	2 33	5 56	5 42	4 40	0 13	5 58	5 38	4 38	3	10	12	4	5	8	8		
4 Tue.	11 7	1	2	2	3 38	5 54	5 45	3 38	3 32	5 55	5 45	4 46	3 32	5 56	5 45	4 46	3 32	5 57	5 43	4 50	0 13	5 58	5 39	4 54	3	11	13	4	5	8	7		
5 Wed.	11 26	1	2	2	4 32	5 55	5 46	4 32	4 30	5 56	5 46	5 39	4 30	5 57	5 46	5 39	4 30	5 58	5 44	5 9	0 13	5 59	5 40	5 10	3	12	14	5	7	7	7		
6 Thu.	11 44	1	2	2	5 25	5 56	5 47	5 25	5 26	5 57	5 47	6 30	5 26	5 58	5 48	6 30	5 26	5 59	5 48	6 40	0 13	5 59	5 41	6 21	3	13	15	6	8	8	8		
7 Fri.	12 1	1	2	3	6 18	5 56	5 48	6 18	6 22	5 58	5 48	7 18	6 22	5 59	5 49	7 18	6 22	5 60	5 49	7 29	0 13	5 60	5 50	7 29	3	14	16	7	9	8	8		
8 Sat.	12 19	1	2	3	7 11	5 57	5 49	7 11	6 0	5 59	5 49	8 16	6 4	5 59	5 49	8 16	6 4	5 60	5 49	8 27	0 13	5 60	5 51	8 27	3	15	17	8	9	8	8		
9 Sun.	12 35	1	2	3	8 7	5 58	5 50	8 7	6 0	5 59	5 50	9 16	6 5	5 59	5 50	9 16	6 5	5 60	5 50	9 27	0 13	5 60	5 52	9 27	3	16	18	9	9	8	8		
10 Mon.	12 52	1	3	4	9 4	5 58	5 51	9 4	7 6	5 58	5 51	10 16	7 5	5 58	5 51	10 16	7 5	5 59	5 51	10 27	0 13	5 59	5 53	10 27	3	17	19	10	10	8	8		
11 Tue.	1 3	2	4	5	10 55	5 59	5 52	10 55	8 13	5 59	5 52	11 27	8 13	5 59	5 52	11 27	8 13	5 60	5 52	11 38	0 13	5 60	5 54	11 38	3	18	20	11	11	8	8		
12 Wed.	1 23	2	4	6	11 57	5 59	5 53	11 57	9 0	5 59	5 53	12 10	9 0	5 59	5 53	12 10	9 0	5 60	5 53	12 21	0 13	5 60	5 55	12 21	3	19	21	12	12	8	8		
13 Thu.	1 38	3	5	8	6 0	5 59	5 54	6 0	9 55	5 59	5 54	1 38	9 55	5 59	5 54	1 38	9 55	5 60	5 54	1 49	0 13	5 60	5 56	1 49	3	20	22	13	13	8	8		
14 Fri.	1 52	3	6	9	6 1	5 59	5 55	6 1	1 38	5 59	5 55	2 41	1 38	5 59	5 55	2 41	1 38	5 60	5 55	2 52	0 13	5 60	5 57	2 52	3	21	23	14	14	8	8		
15 Sat.	2 6	3	6	9	6 1	5 59	5 55	6 1	1 38	5 59	5 55	2 41	1 38	5 59	5 55	2 41	1 38	5 60	5 55	2 52	0 13	5 60	5 57	2 52	3	22	24	15	15	8	8		
16 Sun.	2 19	3	6	9	6 2	5 59	5 56	6 2	2 20	5 59	5 56	3 42	2 20	5 59	5 56	3 42	2 20	5 60	5 56	3 53	0 13	5 60	5 58	3 53	3	23	25	16	16	8	8		
17 Mon.	2 32	3	6	9	6 3	5 59	5 57	6 3	2 20	5 59	5 57	3 42	2 20	5 59	5 57	3 42	2 20	5 60	5 57	3 53	0 13	5 60	5 58	3 53	3	24	26	17	17	8	8		
18 Tue.	2 44	3	6	9	6 4	5 59	5 58	6 4	2 20	5 59	5 58	3 42	2 20	5 59	5 58	3 42	2 20	5 60	5 58	3 53	0 13	5 60	5 58	3 53	3	25	27	18	18	8	8		
19 Wed.	2 56	3	6	10	6 4	5 59	5 58	6 4	2 20	5 59	5 58	3 42	2 20	5 59	5 58	3 42	2 20	5 60	5 58	3 53	0 13	5 60	5 58	3 53	3	26	28	19	19	8	8		
20 Thu.	3 8	3	6	10	6 5	5 59	5 59	6 5	2 20	5 59	5 59	3 42	2 20	5 59	5 59	3 42	2 20	5 60	5 59	3 53	0 13	5 60	5 59	3 53	3	27	29	20	20	8	8		
21 Fri.	3 19	3	6	10	6 5	5 59	5 59	6 5	2 20	5 59	5 59	3 42	2 20	5 59	5 59	3 42	2 20	5 60	5 59	3 53	0 13	5 60	5 59	3 53	3	28	30	21	21	8	8		
22 Sat.	3 30	3	7	10	6 6	5 59	5 59	6 6	2 20	5 59	5 59	3 42	2 20	5 59	5 59	3 42	2 20	5 60	5 59	3 53	0 13	5 60	5 59	3 53	3	29	31	22	22	8	8		
23 Sun.	3 41	3	7	10	6 6	5 59	5 59	6 6	2 20	5 59	5 59	3 42	2 20	5 59	5 59	3 42	2 20	5 60	5 59	3 53	0 13	5 60	5 59	3 53	3	30	32	23	23	8	8		
24 Mon.	3 52	3	7	10	6 6	5 59	5 59	6 6	2 20	5 59	5 59	3 42	2 20	5 59	5 59	3 42	2 20	5 60	5 59	3 53	0 13	5 60	5 59	3 53	3	31	33	24	24	8	8		
25 Tue.	4 3	3	7	10	6 6	5 59	5 59	6 6	2 20	5 59	5 59	3 42	2 20	5 59	5 59	3 42	2 20	5 60	5 59	3 53	0 13	5 60	5 59	3 53	3	32	34	25	25	8	8		
26 Wed.	4 14	3	7	10	6 6	5 59	5 59	6 6	2 20	5 59	5 59	3 42	2 20	5 59	5 59	3 42	2 20	5 60	5 59	3 53	0 13	5 60	5 59	3 53	3	33	35	26	26	8	8		
27 Thu.	4 25	3	7	10	6 6	5 59	5 59	6 6	2 20	5 59	5 59	3 42	2 20	5 59	5 59	3 42	2 20	5 60	5 59	3 53	0 13	5 60	5 59	3 53	3	34	36	27	27	8	8		
28 Fri.	4 36	3	7	10	6 6	5 59	5 59	6 6	2 20	5 59	5 59	3 42	2 20	5 59	5 59	3 42	2 20	5 60	5 59	3 53	0 13	5 60	5 59	3 53	3	35	37	28	28	8	8		
29 Sat.	4 47	3	7	10	6 6	5 59	5 59	6 6	2 20	5 59	5 59	3 42	2 20	5 59	5 59	3 42	2 20	5 60	5 59	3 53	0 13	5 60	5 59	3 53	3	36	38	29	29	8	8		
30 Sun.	4 58	3	7	10	6 6	5 59	5 59	6 6	2 20	5 59	5 59	3 42	2 20	5 59	5 59	3 42	2 20	5 60	5 59	3 53	0 13	5 60	5 59	3 53	3	37	39	30	30	8	8		
31 Mon.	5 9	3	7	10	6 6	5 59	5 59	6 6	2 20	5 59	5 59	3 42	2 20	5 59	5 59	3 42	2 20	5 60	5 59	3 53	0 13	5 60	5 59	3 53	3	38	40	31	31	8	8		

NOVEMBER

1949

Nov.	Sun fast	LOCAL CIVIL TIME Latitude 30° n.			LOCAL CIVIL TIME Latitude 35° n.			LOCAL CIVIL TIME Latitude 40° n.			LOCAL CIVIL TIME Latitude 45° n.			Moon's transit			a- factor, moonset			Moon's phases		
		Sun			Sun			Sun			Sun			h m			90° 105° 120°			E.S.T. d h m		
		h m	set	rise	h m	set	rise	h m	set	rise	h m	set	rise	h m	set	rise	m	m	m	○	○	○
1 Tue.	16 21	6 14	5 14	3 15	6 20	5 6	6 28	4 58	3 16	2 19	4 49	3 18	2 15	9 12	3	5	m	m	m	○	○	○
2 Wed.	16 23	6 14	5 13	3 15	6 21	5 6	6 30	4 57	3 16	2 19	4 49	3 18	2 15	9 12	3	5	m	m	m	○	○	○
3 Thu.	16 24	6 15	5 12	3 15	6 22	5 6	6 31	4 56	3 16	2 19	4 48	3 18	2 15	9 11	3	5	m	m	m	○	○	○
4 Fri.	16 24	6 16	5 11	3 15	6 23	5 6	6 32	4 55	3 16	2 19	4 47	3 18	2 15	9 10	3	5	m	m	m	○	○	○
5 Sat.	16 23	6 17	5 10	3 15	6 24	5 6	6 33	4 54	3 16	2 19	4 46	3 18	2 15	9 09	3	5	m	m	m	○	○	○
6 Sun.	16 21	6 17	5 10	3 15	6 25	5 6	6 34	4 53	3 16	2 19	4 45	3 18	2 15	9 08	3	5	m	m	m	○	○	○
7 Mon.	16 18	6 18	5 9	3 15	6 26	5 6	6 35	4 52	3 16	2 19	4 44	3 18	2 15	9 07	3	5	m	m	m	○	○	○
8 Tue.	16 15	6 19	5 8	3 15	6 27	5 6	6 36	4 51	3 16	2 19	4 43	3 18	2 15	9 06	3	5	m	m	m	○	○	○
9 Wed.	16 11	6 20	5 8	3 15	6 28	5 6	6 37	4 50	3 16	2 19	4 42	3 18	2 15	9 05	3	5	m	m	m	○	○	○
10 Thu.	16 5	6 21	5 7	3 15	6 29	5 6	6 38	4 49	3 16	2 19	4 41	3 18	2 15	9 04	3	5	m	m	m	○	○	○
11 Fri.	15 59	6 22	5 6	3 15	6 30	5 6	6 39	4 48	3 16	2 19	4 40	3 18	2 15	9 03	3	5	m	m	m	○	○	○
12 Sat.	15 53	6 23	5 5	3 15	6 31	5 6	6 40	4 47	3 16	2 19	4 39	3 18	2 15	9 02	3	5	m	m	m	○	○	○
13 Sun.	15 45	6 23	5 5	3 15	6 32	5 6	6 41	4 46	3 16	2 19	4 38	3 18	2 15	9 01	3	5	m	m	m	○	○	○
14 Mon.	15 36	6 24	5 5	3 15	6 33	5 6	6 42	4 45	3 16	2 19	4 37	3 18	2 15	9 00	3	5	m	m	m	○	○	○
15 Tue.	15 27	6 25	5 4	3 15	6 34	5 6	6 43	4 44	3 16	2 19	4 36	3 18	2 15	8 59	3	5	m	m	m	○	○	○
16 Wed.	15 17	6 26	5 4	3 15	6 35	5 6	6 44	4 43	3 16	2 19	4 35	3 18	2 15	8 58	3	5	m	m	m	○	○	○
17 Thu.	15 5	6 26	5 3	3 15	6 36	5 6	6 45	4 42	3 16	2 19	4 34	3 18	2 15	8 57	3	5	m	m	m	○	○	○
18 Fri.	14 53	6 27	5 3	3 15	6 37	5 6	6 46	4 41	3 16	2 19	4 33	3 18	2 15	8 56	3	5	m	m	m	○	○	○
19 Sat.	14 41	6 28	5 2	3 15	6 38	5 6	6 47	4 40	3 16	2 19	4 32	3 18	2 15	8 55	3	5	m	m	m	○	○	○
20 Sun.	14 27	6 29	5 2	3 15	6 39	5 6	6 48	4 39	3 16	2 19	4 31	3 18	2 15	8 54	3	5	m	m	m	○	○	○
21 Mon.	14 12	6 30	5 2	3 15	6 40	5 6	6 49	4 38	3 16	2 19	4 30	3 18	2 15	8 53	3	5	m	m	m	○	○	○
22 Tue.	13 57	6 31	5 2	3 15	6 41	5 6	6 50	4 37	3 16	2 19	4 29	3 18	2 15	8 52	3	5	m	m	m	○	○	○
23 Wed.	13 41	6 32	5 1	3 15	6 42	5 6	6 51	4 36	3 16	2 19	4 28	3 18	2 15	8 51	3	5	m	m	m	○	○	○
24 Thu.	13 24	6 33	5 1	3 15	6 43	5 6	6 52	4 35	3 16	2 19	4 27	3 18	2 15	8 50	3	5	m	m	m	○	○	○
25 Fri.	13 6	6 33	5 1	3 15	6 44	5 6	6 53	4 34	3 16	2 19	4 26	3 18	2 15	8 49	3	5	m	m	m	○	○	○
26 Sat.	12 48	6 34	5 1	3 15	6 45	5 6	6 54	4 33	3 16	2 19	4 25	3 18	2 15	8 48	3	5	m	m	m	○	○	○
27 Sun.	12 29	6 35	5 0	3 15	6 46	5 6	6 55	4 32	3 16	2 19	4 24	3 18	2 15	8 47	3	5	m	m	m	○	○	○
28 Mon.	12 9	6 36	5 0	3 15	6 47	5 6	6 56	4 31	3 16	2 19	4 23	3 18	2 15	8 46	3	5	m	m	m	○	○	○
29 Tue.	11 48	6 37	5 0	3 15	6 48	5 6	6 57	4 30	3 16	2 19	4 22	3 18	2 15	8 45	3	5	m	m	m	○	○	○
30 Wed.	11 27	6 37	5 0	3 15	6 49	5 6	6 58	4 29	3 16	2 19	4 21	3 18	2 15	8 44	3	5	m	m	m	○	○	○

P.S.T.
d h m
○ 5 1 9
○ 13 7 47
● 20 11 28
○ 27 2 1

M.S.T.
d h m
○ 5 2 9
○ 13 8 47
● 20 0 29
○ 27 3 1

C.S.T.
d h m
○ 5 3 9
○ 13 9 47
● 20 1 29
○ 27 4 1

E.S.T.
d h m
○ 5 4 9
○ 13 10 47
● 20 2 29
○ 27 5 1

Moon's
phases

DECEMBER

1949

Moon's
phasesE.S.T.
d h mO 5 10 13
● 12 8 48
● 19 1 55
D 27 1 31C.S.T.
d h mO 5 9 13
● 12 7 48
● 19 12 55
D 27 0 31M.S.T.
d h mO 5 8 13
● 12 6 48
● 19 11 55
D 26 11 31P.S.T.
d h mO 5 7 13
● 12 5 48
● 19 10 55
D 26 10 31

Dec.	Sun fast	LOCAL CIVIL TIME Latitude 30° n.						LOCAL CIVIL TIME Latitude 35° n.						LOCAL CIVIL TIME Latitude 40° n.						LOCAL CIVIL TIME Latitude 45° n.					
		a- factor, moonrise		Sun- rise	Moon- rise	Moon- set	Sun- rise	Moon- rise	Moon- set	Sun- rise	Moon- rise	Moon- set	Sun- rise	Moon- rise	Moon- set	Sun- rise	Moon- rise	Moon- set	Moon's upper transit	a- factor, moonset					
		90°	105° 120°																		90°	105° 120°	90°	105° 120°	90°	105° 120°
1 Thu.	m s	m	m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	m					
2 Fri.	11 5	1	2	6 38	2 59	2 58	6 49	2 58	2 58	7 2	4 38	2 20	3 9	2 12	2 12	3 15	2 12	2 12	3 15	9 8					
3 Sat.	10 43	1	2	6 39	3 54	2 52	6 50	2 52	2 52	7 3	4 35	2 42	4 10	2 31	2 31	4 20	2 31	2 31	4 20	9 51					
4 Sun.	10 20	1	3	6 40	5 0	3 33	6 51	3 22	3 22	7 4	4 35	3 8	5 12	2 20	2 20	4 20	2 20	2 20	4 20	10 37					
5 Mon.	9 56	2	3	6 41	5 0	4 11	6 52	3 57	3 57	7 5	4 35	3 41	6 16	2 19	2 19	4 19	2 19	2 19	4 19	11 26					
6 Tue.	9 32	2	4	6 42	5 0	4 54	6 53	4 39	4 39	7 6	4 35	4 21	7 20	2 22	2 22	4 22	2 22	2 22	4 22	11 26					
7 Wed.	9 7	2	5	6 43	5 0	5 46	6 54	5 29	5 29	7 7	4 35	5 10	8 21	2 23	2 23	4 23	2 23	2 23	4 23	11 26					
8 Thu.	8 42	3	5	6 43	5 0	6 43	6 54	6 28	6 28	7 8	4 35	6 7	9 17	2 24	2 24	4 24	2 24	2 24	4 24	11 26					
9 Fri.	8 16	3	5	6 43	5 0	7 44	6 55	6 48	6 48	7 9	4 35	7 12	10 6	2 25	2 25	4 25	2 25	2 25	4 25	11 26					
10 Sat.	7 49	3	6	6 44	5 0	8 48	6 56	6 48	6 48	7 10	4 35	8 33	11 19	2 26	2 26	4 26	2 26	2 26	4 26	11 26					
11 Sun.	7 22	3	6	6 45	5 1	9 52	6 57	6 49	6 49	7 10	4 35	9 33	11 19	2 27	2 27	4 27	2 27	2 27	4 27	11 26					
12 Mon.	6 55	3	6	6 46	5 1	10 56	6 58	6 49	6 49	7 11	4 35	10 44	11 47	2 28	2 28	4 28	2 28	2 28	4 28	11 26					
13 Tue.	6 28	3	6	6 46	5 1	11 59	6 58	6 49	6 49	7 12	4 35	11 55	12 37	2 29	2 29	4 29	2 29	2 29	4 29	11 26					
14 Wed.	5 59	3	6	6 47	5 1	12 35	6 59	6 49	6 49	7 13	4 35	1 6	1 0	2 30	2 30	4 30	2 30	2 30	4 30	11 26					
15 Thu.	5 31	3	6	6 48	5 2	1 4	7 0	6 50	6 50	7 14	4 38	2 20	2 27	2 31	2 31	4 31	2 31	2 31	4 31	11 26					
16 Fri.	5 2	3	6	6 48	5 2	2 9	7 0	6 50	6 50	7 14	4 38	2 20	2 27	2 32	2 32	4 32	2 32	2 32	4 32	11 26					
17 Sat.	4 33	3	7	6 49	5 2	3 18	7 1	6 50	6 50	7 15	4 38	3 35	3 35	2 33	2 33	4 33	2 33	2 33	4 33	11 26					
18 Sun.	4 4	3	7	6 50	5 3	4 28	7 2	6 51	6 51	7 16	4 38	4 54	4 54	2 34	2 34	4 34	2 34	2 34	4 34	11 26					
19 Mon.	3 34	3	6	6 50	5 3	5 41	7 2	6 51	6 51	7 16	4 37	6 13	6 13	2 35	2 35	4 35	2 35	2 35	4 35	11 26					
20 Tue.	3 5	3	5	6 51	5 4	6 51	7 3	6 51	6 51	7 17	4 37	7 27	7 27	2 36	2 36	4 36	2 36	2 36	4 36	11 26					
21 Wed.	2 35	2	5	6 51	5 4	7 55	7 3	6 52	6 52	7 18	4 37	8 30	8 30	2 37	2 37	4 37	2 37	2 37	4 37	11 26					
22 Thu.	2 5	2	5	6 52	5 4	8 50	7 4	6 52	6 52	7 18	4 38	9 23	9 23	2 38	2 38	4 38	2 38	2 38	4 38	11 26					
23 Fri.	1 35	1	3	6 52	5 5	9 35	7 4	6 53	6 53	7 19	4 38	10 3	10 3	2 39	2 39	4 39	2 39	2 39	4 39	11 26					
24 Sat.	1 5	1	2	6 53	5 6	10 14	7 5	6 53	6 53	7 19	4 38	10 35	10 35	2 40	2 40	4 40	2 40	2 40	4 40	11 26					
25 Sun.	0 35	1	2	6 53	5 6	10 46	7 5	6 54	6 54	7 20	4 38	11 1	11 1	2 41	2 41	4 41	2 41	2 41	4 41	11 26					
26 Mon.	SLOW	1	2	6 54	5 6	11 15	7 6	6 54	6 54	7 20	4 38	11 23	11 23	2 42	2 42	4 42	2 42	2 42	4 42	11 26					
27 Tue.	0 25	1	2	6 54	5 7	11 41	7 6	6 55	6 55	7 20	4 38	11 43	11 43	2 43	2 43	4 43	2 43	2 43	4 43	11 26					
28 Wed.	0 55	1	2	6 54	5 8	12 6	7 7	6 55	6 55	7 21	4 38	12 2	12 2	2 44	2 44	4 44	2 44	2 44	4 44	11 26					
29 Thu.	1 24	1	2	6 55	5 8	12 33	7 7	6 55	6 55	7 21	4 38	12 22	12 22	2 45	2 45	4 45	2 45	2 45	4 45	11 26					
30 Fri.	1 53	1	2	6 55	5 9	1 0	7 7	6 55	6 55	7 21	4 38	12 44	12 44	2 46	2 46	4 46	2 46	2 46	4 46	11 26					
31 Sat.	2 23	1	2	6 55	5 10	1 31	7 7	6 55	6 55	7 22	4 38	1 9	1 9	2 47	2 47	4 47	2 47	2 47	4 47	11 26					
	2 52	2	3	6 56	5 10	2 7	7 8	6 56	6 56	7 22	4 38	1 40	1 40	2 48	2 48	4 48	2 48	2 48	4 48	11 26					

Longitude, Latitude, Magnetic Declination of U. S. and Canadian Cities

The last column shows, in degrees, the magnetic declination, which is the angle that the magnetic meridian makes with the true, or geographic, meridian. When the value in degrees is marked w, the north end of the compass needle points west of true north by that number of degrees; when the value is e, the north end of the needle points east of true north by that many degrees.

City	Long.	Lat.	Dec.	City	Long.	Lat.	Dec.
° /	° /	° /	°	° /	° /	°	°
Eastport, Maine.....	67 0	44 54	21 w	Pierre, S. Dak.....	97 33	44 22	12 e
Bangor, Maine.....	68 47	44 48	19 w	Sioux Falls, S. Dak.....	96 44	43 33	11 e
Portland, Maine.....	70 15	43 40	17 w	Lincoln, Nebr.....	96 40	40 50	10 e
Manchester, N. H.....	71 30	43 0	16 w	North Platte, Nebr.....	100 46	41 8	12 e
Montpelier, Vt.....	72 32	44 15	16 w	Wichita, Kans.....	97 17	37 43	10 e
Boston, Mass.....	71 5	42 21	15 w	Garden City, Kans.....	100 53	37 58	13 e
Springfield, Mass.....	72 34	42 6	14 w	Oklahoma City, Okla.....	97 28	35 26	10 e
Providence, R. I.....	71 24	41 50	15 w	Amarillo, Tex.....	101 50	35 11	12 e
New Haven, Conn.....	72 55	41 19	12 w	Dallas, Tex.....	96 46	32 46	9 e
New York, N. Y.....	73 57½	40 48½	12 w	Sweetwater, Tex.....	100 24	32 28	11 e
Albany, N. Y.....	73 45	42 40	13 w	San Antonio, Tex.....	98 33	29 23	10 e
Watertown, N. Y.....	75 55	43 58	13 w	El Paso, Tex.....	106 29	31 46	13 e
Syracuse, N. Y.....	76 8	43 2	11 w	Havre, Mont.....	109 43	48 33	20 e
Buffalo, N. Y.....	78 50	42 55	7 w	Helena, Mont.....	112 2	46 35	19 e
Scranton, Pa.....	75 39	41 24	10 w	Lander, Wyo.....	108 40	42 50	17 e
Philadelphia, Pa.....	75 10	39 57	10 w	Cheyenne, Wyo.....	104 52	41 9	15 e
Pittsburgh, Pa.....	79 57	40 27	5 w	Denver, Colo.....	105 0	39 45	14 e
Atlantic City, N. J.....	74 25	39 22	10 w	Grand Junction, Colo.....	108 33	39 5	15 e
Baltimore, Md.....	76 38	39 18	8 w	Trinidad, Colo.....	104 30	37 10	14 e
Richmond, Va.....	77 29	37 33	6 w	Santa Fe, N. Mex.....	105 57	35 41	13 e
Roanoke, Va.....	79 57	37 17	3 w	Carlsbad, N. Mex.....	104 15	32 26	13 e
Charleston, W. Va.....	81 38	38 21	2 w	Silver City, N. Mex.....	108 18	32 46	14 e
Raleigh, N. C.....	78 39	35 46	4 w	Idaho Falls, Idaho.....	112 1	43 30	18 e
Charlotte, N. C.....	80 50	35 14	2 w	Salmon, Idaho.....	113 54	45 11	20 e
Wilmington, N. C.....	77 57	34 14	3 w	Lewiston, Idaho.....	117 2	46 24	21 e
Columbia, S. C.....	81 2	34 0	1 w	Boise, Idaho.....	116 13	43 36	19 e
Charleston, S. C.....	79 56	32 47	2 w	Salt Lake City, Utah.....	111 54	40 46	17 e
Atlanta, Ga.....	84 23	33 45	2 e	Richfield, Utah.....	112 5	38 46	17 e
Savannah, Ga.....	81 5	32 5	0	Flagstaff, Ariz.....	111 41	35 13	15 e
Jacksonville, Fla.....	81 40	30 22	1 e	Phoenix, Ariz.....	112 4	33 29	15 e
Tampa, Fla.....	82 27	27 57	2 e	Nogales, Ariz.....	110 56	31 21	14 e
Miami, Fla.....	80 12	25 46	1 e	Las Vegas, Nev.....	115 12	36 10	16 e
Key West, Fla.....	81 48	24 33	3 e	Elko, Nev.....	115 47	40 49	18 e
Sault Ste. Marie, Mich.....	84 21	46 30	4 w	Austin, Nev.....	117 4	39 29	18 e
Detroit, Mich.....	83 3	42 20	3 w	Reno, Nev.....	119 49	39 30	18 e
Grand Rapids, Mich.....	85 40	42 58	1 e	Spokane, Wash.....	117 26	47 40	23 e
Cleveland, Ohio.....	81 37	41 28	5 w	Yakima, Wash.....	120 33	46 34	22 e
Columbus, Ohio.....	83 1	40 0	2 w	Seattle, Wash.....	122 20	47 37	23 e
Cincinnati, Ohio.....	84 30	39 8	1 e	Hogium, Wash.....	123 54	46 59	23 e
Louisville, Ky.....	85 46	38 15	1 e	Portland, Oreg.....	122 41	45 31	23 e
Knoxville, Tenn.....	83 56	35 57	0	Eugene, Oreg.....	123 5	44 3	22 e
Nashville, Tenn.....	86 47	36 10	3 e	Baker, Oreg.....	117 50	44 47	21 e
Memphis, Tenn.....	90 3	35 9	6 e	Klamath Falls, Oreg.....	121 44	42 10	19 e
Birmingham, Ala.....	86 50	33 30	3 e	Sacramento, Calif.....	121 30	38 35	17 e
Montgomery, Ala.....	86 18	32 21	3 e	San Francisco, Calif.....	122 26	37 47	18 e
Mobile, Ala.....	88 3	30 42	5 e	Fresno, Calif.....	119 48	36 44	17 e
Jackson, Miss.....	90 12	32 20	7 e	Los Angeles, Calif.....	118 15	34 3	16 e
Indianapolis, Ind.....	86 10	39 46	1 e	Needles, Calif.....	114 36	34 50	15 e
Milwaukee, Wis.....	87 55	43 2	2 e	San Diego, Calif.....	117 10	32 42	15 e
Chicago, Ill.....	87 37	41 50	2 e	El Centro, Calif.....	115 33	32 48	15 e
Springfield, Ill.....	89 38	39 48	4 e	St. John, N. B.....	66 10	45 18	22 w
Duluth, Minn.....	92 5	46 49	7 e	Quebec, Que.....	71 11	46 49	20 w
Minneapolis, Minn.....	93 14	44 59	7 e	Montreal, Que.....	73 35	45 30	16 w
Dubuque, Iowa.....	90 40	42 31	5 e	Ottawa, Ont.....	75 43	45 24	14 w
Des Moines, Iowa.....	93 37	41 35	7 e	Kingston, Ont.....	76 30	44 15	12 w
Kansas City, Mo.....	94 35	39 6	9 e	Toronto, Ont.....	79 24	43 40	8 w
St. Louis, Mo.....	90 12	38 35	5 e	London, Ont.....	81 34	43 2	5 w
Springfield, Mo.....	93 17	37 13	7 e	Port Arthur, Ont.....	89 17	48 30	1 e
Hot Springs, Ark.....	93 3	34 31	8 e	Winnipeg, Man.....	97 7	49 54	11 e
Shreveport, La.....	93 42	32 28	8 e	Moose Jaw, Sask.....	105 31	50 37	18 e
New Orleans, La.....	90 4	29 57	6 e	Calgary, Alta.....	114 1	51 1	23 e
Fargo, N. Dak.....	96 48	46 52	10 e	Nelson, B. C.....	117 17	49 30	23 e
Bismarck, N. Dak.....	100 47	46 48	14 e	Victoria, B. C.....	123 21	48 25	24 e

Longitude and Latitude of Foreign Cities—by Continents **and Time of Day Corresponding to 12:00 Noon, E.S.T.**

City	Time	Long.	Lat.	City	Time	Long.	Lat.
		° /	° /			° /	° /
Nome Alaska.....	6:00 a.m.	165 30 w	64 25 n	Munich, Germany.....	6:00 p.m.	11 35 e	48 8 n
Sitka, Alaska.....	9:00 a.m.	135 15 w	57 10 n	Zürich, Switzerland.....	6:00 p.m.	8 31 e	47 21 n
Honolulu, Hawaii.....	7:00 a.m.	157 50 w	21 18 n	Milan, Italy.....	6:00 p.m.	9 10 e	45 27 n
Chihuahua, Mexico.....	11:00 a.m.	106 5 w	28 37 n	Venice, Italy.....	6:00 p.m.	12 20 e	45 26 n
Mexico City, Mexico.....	11:00 a.m.	99 7 w	19 26 n	Rome, Italy.....	6:00 p.m.	12 27 e	41 54 n
Veracruz, Mexico.....	11:00 a.m.	96 10 w	19 10 n	Naples, Italy.....	6:00 p.m.	14 15 e	40 50 n
Panamá City, Panamá.....	12:00 noon	79 32 w	8 58 n	Warsaw, Poland.....	6:00 p.m.	21 0 e	52 14 n
Havana, Cuba.....	12:00 noon	82 23 w	23 8 n	Prague, Czechoslovakia.....	6:00 p.m.	14 26 e	50 5 n
Kingston, Jamaica.....	12:00 noon	76 49 w	17 59 n	Vienna, Austria.....	6:00 p.m.	16 20 e	48 14 n
San Juan, Puerto Rico.....	1:00 p.m.	66 10 w	18 30 n	Budapest, Hungary.....	6:00 p.m.	19 5 e	47 30 n
Bogotá, Colombia.....	12:00 noon	74 15 w	4 32 n	Belgrade, Yugoslavia.....	6:00 p.m.	20 32 e	44 52 n
Caracas, Venezuela.....	12:30 p.m.	67 2 w	10 28 n	Bucharest, Rumania.....	7:00 p.m.	26 7 e	44 25 n
Georgetown, British Guiana.....	1:15 p.m.	58 15 w	6 45 n	Sofia, Bulgaria.....	7:00 p.m.	23 20 e	42 40 n
Paramaribo, Surinam.....	1:19 p.m.	55 15 w	5 45 n	Athens, Greece.....	7:00 p.m.	23 43 e	37 58 n
Cayenne, French Guiana.....	1:00 p.m.	52 18 w	4 49 n	Leningrad, U. S. S. R.....	7:00 p.m.	30 18 e	59 56 n
Guayaquil, Ecuador.....	12:00 noon	79 56 w	2 10 s	Moscow, U. S. S. R.....	7:00 p.m.	37 36 e	55 45 n
Lima, Peru.....	12:00 noon	77 2 w	12 0 s	Saratov, U. S. S. R.....	8:00 p.m.	46 0 e	51 31 n
Belém, Brazil.....	2:00 p.m.	48 29 w	1 28 s	Odessa, U. S. S. R.....	7:00 p.m.	30 48 e	46 27 n
São Salvador, Brazil.....	2:00 p.m.	38 27 w	12 56 s	Algiers, Algeria.....	5:00 p.m.	3 0 e	36 50 n
Rio de Janeiro, Brazil.....	2:00 p.m.	43 12 w	22 57 s	Tripoli, Libya.....	6:00 p.m.	13 12 e	32 57 n
São Paulo, Brazil.....	2:00 p.m.	46 31 w	23 31 s	Cairo, Egypt.....	7:00 p.m.	31 21 e	30 2 n
La Paz, Bolivia.....	1:00 p.m.	68 22 w	16 27 s	Dakar, French West Africa.....	4:00 p.m.	17 28 w	14 40 n
Asunción, Paraguay.....	1:00 p.m.	57 40 w	25 15 s	Leopoldville, Belgian Congo.....	6:00 p.m.	15 17 e	4 18 s
Montevideo, Uruguay.....	1:30 p.m.	56 10 w	34 53 s	Addis Ababa, Ethiopia.....	8:00 p.m.	38 49 e	9 2 n
Iquique, Chile.....	1:00 p.m.	70 7 w	20 10 s	Nairobi, Kenya.....	8:00 p.m.	36 55 e	1 25 n
Santiago, Chile.....	1:00 p.m.	70 45 w	33 28 s	Johannesburg, U. of S. Af.....	7:00 p.m.	28 4 e	26 12 s
Córdoba, Argentina.....	1:00 p.m.	64 10 w	31 28 s	Durban, U. of S. Af.....	8:00 p.m.	30 53 e	29 53 s
Buenos Aires, Argentina.....	1:00 p.m.	58 22 w	34 35 s	Capetown, U. of S. Af.....	7:00 p.m.	18 22 e	33 55 s
Reykjavik, Iceland.....	4:00 p.m.	21 58 w	64 4 n	Tananarive, Madagascar.....	8:00 p.m.	47 33 e	18 50 s
Belfast, Northern Ireland.....	5:00 p.m.	5 56 w	54 37 n	Irkutsk, U. S. S. R.....	0:00 a.m.*	104 20 e	52 30 n
Dublin, Eire.....	5:00 p.m.	6 15 w	53 20 n	Vladivostok, U. S. S. R.....	2:00 a.m.*	132 0 e	43 10 n
Aberdeen, Scotland.....	5:00 p.m.	2 9 w	57 9 n	Peiping, China.....	1:00 a.m.*	116 25 e	39 55 n
Edinburgh, Scotland.....	5:00 p.m.	3 10 w	55 55 n	Nanking, China.....	1:00 a.m.*	118 53 e	32 3 n
Glasgow, Scotland.....	5:00 p.m.	4 15 w	55 50 n	Shanghai, China.....	1:00 a.m.*	121 28 e	31 10 n
Newcastle-on-Tyne, Eng.....	5:00 p.m.	1 37 w	54 53 n	Chungking, China.....	0:00 a.m.*	106 34 e	29 46 n
Leeds, England.....	5:00 p.m.	1 30 w	53 45 n	Canton, China.....	1:00 a.m.*	113 15 e	23 7 n
Manchester, England.....	5:00 p.m.	2 15 w	53 30 n	Manila, Philippine Islands.....	1:00 a.m.*	120 57 e	14 35 n
Liverpool, England.....	5:00 p.m.	3 0 w	53 25 n	Bangkok, Siam.....	0:00 a.m.*	100 30 e	13 45 n
Birmingham, England.....	5:00 p.m.	1 55 w	52 25 n	Singapore, British Malaya.....	0:30 a.m.*	103 55 e	1 14 n
London, England.....	5:00 p.m.	0 5 w	51 32 n	Rangoon, Burma.....	11:30 p.m.	96 0 e	16 50 n
Bristol, England.....	5:00 p.m.	2 35 w	51 28 n	Calcutta, India.....	10:53 p.m.	88 24 e	22 34 n
Plymouth, England.....	5:00 p.m.	4 5 w	50 25 n	Bombay, India.....	10:30 p.m.	72 48 e	19 0 n
Hammerfest, Norway.....	6:00 p.m.	23 38 e	70 38 n	Mecca, Saudi Arabia.....	8:00 p.m.	39 45 e	21 29 n
Oslo, Norway.....	6:00 p.m.	10 42 e	59 57 n	Ankara, Turkey.....	7:00 p.m.	32 55 e	39 55 n
Stockholm, Sweden.....	6:00 p.m.	18 3 e	59 17 n	Tokyo, Japan.....	2:00 a.m.*	139 45 e	35 40 n
Helsinki, Finland.....	7:00 p.m.	25 0 e	60 10 n	Nagoya, Japan.....	2:00 a.m.*	136 56 e	35 7 n
Copenhagen, Denmark.....	6:00 p.m.	12 34 e	55 40 n	Osaka, Japan.....	2:00 a.m.*	135 30 e	34 32 n
Lisbon, Portugal.....	5:00 p.m.	9 9 w	38 44 n	Nagasaki, Japan.....	2:00 a.m.*	129 57 e	32 48 n
Madrid, Spain.....	5:00 p.m.	3 42 w	40 26 n	Darwin, Australia.....	2:30 a.m.*	130 51 e	12 28 s
Barcelona, Spain.....	5:00 p.m.	2 9 e	41 23 n	Brisbane, Australia.....	3:00 a.m.*	153 8 e	27 29 s
Marseille, France.....	5:00 p.m.	5 20 e	43 20 n	Sydney, Australia.....	3:00 a.m.*	151 0 e	34 0 s
Bordeaux, France.....	5:00 p.m.	0 31 w	44 50 n	Melbourne, Australia.....	3:00 a.m.*	144 58 e	37 47 s
Lyon, France.....	5:00 p.m.	4 50 e	45 45 n	Adelaide, Australia.....	2:30 a.m.*	138 36 e	34 55 s
Paris, France.....	5:00 p.m.	2 20 e	48 48 n	Pelth, Australia.....	1:00 a.m.*	115 52 e	31 57 s
Brussels, Belgium.....	5:00 p.m.	4 22 e	50 52 n	Hobart, Tasmania.....	3:00 a.m.*	147 19 e	42 52 s
Amsterdam, Netherlands.....	5:20 p.m.	4 53 e	52 22 n	Auckland, New Zealand.....	5:00 a.m.*	174 45 e	36 52 s
Bremen, Germany.....	6:00 p.m.	8 49 e	53 5 n	Wellington, New Zealand.....	5:00 a.m.*	174 47 e	41 17 s
Hamburg, Germany.....	6:00 p.m.	10 2 e	53 33 n	Batavia, Java.....	1:00 a.m.*	106 48 e	6 16 s
Berlin, Germany.....	6:00 p.m.	13 25 e	52 30 n	Makassar, Celebes.....	1:00 a.m.*	119 30 e	5 9 s
Frankfurt, Germany.....	6:00 p.m.	8 41 e	50 7 n	Port Moresby, Papua Ter.....	3:00 a.m.*	147 8 e	9 25 s

*On the following day.

The World Calendar

FIRST QUARTER																													
JANUARY								FEBRUARY								MARCH													
S	M	T	W	T	F	S		S	M	T	W	T	F	S		S	M	T	W	T	F	S							
1	2	3	4	5	6	7					1	2	3	4								1	2						
8	9	10	11	12	13	14		5	6	7	8	9	10	11		3	4	5	6	7	8	9							
15	16	17	18	19	20	21		12	13	14	15	16	17	18		10	11	12	13	14	15	16							
22	23	24	25	26	27	28		19	20	21	22	23	24	25		17	18	19	20	21	22	23							
29	30	31						26	27	28	29	30				24	25	26	27	28	29	30							
SECOND QUARTER																													
APRIL								MAY								JUNE													
S	M	T	W	T	F	S		S	M	T	W	T	F	S		S	M	T	W	T	F	S							
1	2	3	4	5	6	7					1	2	3	4								1	2						
8	9	10	11	12	13	14		5	6	7	8	9	10	11		3	4	5	6	7	8	9							
15	16	17	18	19	20	21		12	13	14	15	16	17	18		10	11	12	13	14	15	16							
22	23	24	25	26	27	28		19	20	21	22	23	24	25		17	18	19	20	21	22	23							
29	30	31						26	27	28	29	30				24	25	26	27	28	29	30							
																								W*					
THIRD QUARTER																													
JULY								AUGUST								SEPTEMBER													
S	M	T	W	T	F	S		S	M	T	W	T	F	S		S	M	T	W	T	F	S							
1	2	3	4	5	6	7					1	2	3	4								1	2						
8	9	10	11	12	13	14		5	6	7	8	9	10	11		3	4	5	6	7	8	9							
15	16	17	18	19	20	21		12	13	14	15	16	17	18		10	11	12	13	14	15	16							
22	23	24	25	26	27	28		19	20	21	22	23	24	25		17	18	19	20	21	22	23							
29	30	31						26	27	28	29	30				24	25	26	27	28	29	30							
FOURTH QUARTER																													
OCTOBER								NOVEMBER								DECEMBER													
S	M	T	W	T	F	S		S	M	T	W	T	F	S		S	M	T	W	T	F	S							
1	2	3	4	5	6	7					1	2	3	4								1	2						
8	9	10	11	12	13	14		5	6	7	8	9	10	11		3	4	5	6	7	8	9							
15	16	17	18	19	20	21		12	13	14	15	16	17	18		10	11	12	13	14	15	16							
22	23	24	25	26	27	28		19	20	21	22	23	24	25		17	18	19	20	21	22	23							
29	30	31						26	27	28	29	30				24	25	26	27	28	29	30							
																								W†					

*The Leap-Year World Holiday, W or June 31 (an extra day), follows June 30 in leap years only.
†The Year-End World Holiday, W or December 31 (365th day), follows December 30 every year.

Exposition

The perpetual World Calendar divides the year into equal quarters of 91 days, or thirteen weeks, or three months, or approximately one season. The first month in each quarter contains 31 days. The other two months have 30 days each, every month having twenty-six weekdays plus Sundays. Every quarter with its monthly arrangement of 31-30-30 days begins on a Sunday, the first day of the week, and ends on a Saturday, the seventh day of the week, which is easy for business, accountants and educators because the closing

day of every quarter does not fall on a Sunday. Every year begins logically on the accepted first day of the week, a Sunday, January 1. This plan retains the customary arrangement of weekdays.
The 364-day year is not complete however. The 365th day of the year, essential in keeping the calendar in step with the seasons, is the logical Year-End World Holiday, dated W or December 31, that follows Saturday, December 30, every year. By giving the 365th day, the Year-End World Holiday, a name and date, a blank

ate is avoided. This World Holiday is an integral part of the year; it belongs to and completes the calendar.

The extra day in leap years is the Leap-Year World Holiday, dated W or June 31, and follows Saturday, June 30. By placing these two stabilizing days, the Leap-Year World Holiday in leap years at the end of the second quarter and the Year-End World Holiday every year at the end of the fourth

quarter, the calendar in leap years becomes balanced, each half-year having 183 days. The calendar is thus a stable, balanced, well-coordinated time system.

Seventeen nations have already approved the World Calendar, including Afghanistan, Brazil, Chile, China, Czechoslovakia, Estonia, Greece, Hungary, Mexico, Norway, Panamá, Peru, Saudi Arabia, Spain, Syria, Turkey and Uruguay.

Perpetual Calendar

1800—2000 A. D.

Day of the month	Jan. Oct.	Apr. Jul. Jan.	Sept. Dec.	Jun.	Feb. Mar. Nov.	Aug. Feb.	May	
8 15 22 29	A	B	C	D	E	F	G	Mon.
9 16 23 30	G	A	B	C	D	E	F	Tue.
10 17 24 31	F	G	A	B	C	D	E	Wed.
11 18 25	E	F	G	A	B	C	D	Thur.
12 19 26	D	E	F	G	A	B	C	Fri.
13 20 27	C	D	E	F	G	A	B	Sat.
14 21 28	B	C	D	E	F	G	A	Sun.
EXAMPLES	.....	.....	1800	1801	1802	1803	.....
	1804	1805	1806	1807	.....	1808	1809	
	1810	1811	.....	1812	1813	1814	1815	
	.....	1816	1817	1818	1819	.....	1820	
	1821	1822	1823	.....	1824	1825	1826	
	1827	.....	1828	1829	1830	1831	.....
	1832	1833	1834	1835	.....	1836	1837	
	1838	1839	.....	1840	1841	1842	1843	
	.....	1844	1845	1846	1847	.....	1848	
	1849	1850	1851	.....	1852	1853	1854	
	1855	.....	1856	1857	1858	1859	.....
	1860	1861	1862	1863	.....	1864	1865	
	1866	1867	.....	1868	1869	1870	1871	
	.....	1872	1873	1874	1875	.....	1876	
	1877	1878	1879	.....	1880	1881	1882	
	1883	.....	1884	1885	1886	1887	.....
	1888	1889	1890	1891	.....	1892	1893	
	1894	1895	.....	1896	1897	1898	1899	
	1900	1901	1902	1903	.....	1904	1905	
	1906	1907	.....	1908	1909	1910	1911	
	.....	1912	1913	1914	1915	.....	1916	
	1917	1918	1919	.....	1920	1921	1922	
	1923	.....	1924	1925	1926	1927	.....
	1928	1929	1930	1931	.....	1932	1933	
	1934	1935	.....	1936	1937	1938	1939	
	.....	1940	1941	1942	1943	.....	1944	
	1945	1946	1947	.....	1948	1949	1950	
	1951	.....	1952	1953	1954	1955	.....
	1956	1957	1958	1959	.....	1960	1961	
	1962	1963	.....	1964	1965	1966	1967	
	.....	1968	1969	1970	1971	.....	1972	
	1973	1974	1975	.....	1976	1977	1978	
	1979	.....	1980	1981	1982	1983	.....
	1984	1985	1986	1987	.....	1988	1989	
	1990	1991	.....	1992	1993	1994	1995	
	.....	1996	1997	1998	1999	.....	2000	

(1) Given Nov. 20, 1891, to find the day of the week. Under Nov., opposite 20, is G. In the 1891 column, opposite G is Fri., *ans.*

(2) Given Fri., Oct. —, 1868, to find the possible days of the month. In the 1868 column, opposite Fri. is G. Under Oct., G gives 2, 9, 16, 30, *ans.*, the Fridays of Oct., 1868.

(3) Given Mon., — 5, 1811, to find the possible months. In the 1811 column, opposite Mon. is B. Opposite 5, B gives Aug., the only common-year month available, *ans.*

(4) Given Sat., Feb. 29, —, to find the possible years. Under Feb., leap-year, opposite 29, F. Opposite Sat. F gives leap-years 1812, 1840, 1868, 1896, etc., *ans.*

NOTE: In leap-years, use the Jan. and Feb. italics, but do not use these for common years.

1948	JANUARY							FEBRUARY							MARCH							APRIL							
	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	
	—	—	—	—	1	2	3	1	2	3	4	5	6	7	—	1	2	3	4	5	6	—	—	—	—	1	2	3	4
	4	5	6	7	8	9	10	8	9	10	11	12	13	14	7	8	9	10	11	12	13	4	5	6	7	8	9	10	
	11	12	13	14	15	16	17	15	16	17	18	19	20	21	14	15	16	17	18	19	20	11	12	13	14	15	16	17	
	18	19	20	21	22	23	24	22	23	24	25	26	27	28	21	22	23	24	25	26	27	18	19	20	21	22	23	24	
	25	26	27	28	29	30	31	29	—	—	—	—	—	—	28	29	30	31	—	—	—	25	26	27	28	29	30	—	
MAY							JUNE							JULY							AUGUST								
	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	
	—	—	—	—	—	—	1	—	—	1	2	3	4	5	—	—	—	1	2	3	4	1	2	3	4	5	6	7	
	2	3	4	5	6	7	8	6	7	8	9	10	11	12	4	5	6	7	8	9	10	15	16	17	18	19	20		
	9	10	11	12	13	14	15	13	14	15	16	17	18	19	11	12	13	14	15	16	17	15	16	17	18	19	20		
16	17	18	19	20	21	22	23	20	21	22	23	24	25	26	18	19	20	21	22	23	24	22	23	24	25	26	27		
29	30	31	25	26	27	28	29	27	28	29	30	—	—	—	25	26	27	28	29	30	31	22	23	24	25	26	27	28	
SEPTEMBER							OCTOBER							NOVEMBER							DECEMBER								
	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	
	—	—	—	—	1	2	3	—	—	—	—	1	2	3	—	—	—	1	2	3	4	—	—	—	—	1	2	3	4
	5	6	7	8	9	10	11	3	4	5	6	7	8	9	7	8	9	10	11	12	13	5	6	7	8	9	10	11	
	12	13	14	15	16	17	18	10	11	12	13	14	15	16	14	15	16	17	18	19	20	12	13	14	15	16	17	18	
	19	20	21	22	23	24	25	17	18	19	20	21	22	23	21	22	23	24	25	26	27	19	20	21	22	23	24	25	
	26	27	28	29	30	—	—	24/31	25	26	27	28	29	30	28	29	30	—	—	—	—	26	27	28	29	30	31	—	

1949 JANUARY							FEBRUARY							MARCH						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
—	—	—	—	—	—	1	—	—	1	2	3	4	5	—	—	1	2	3	4	5
2	3	4	5	6	7	8	6	7	8	9	10	11	12	6	7	8	9	10	11	12
9	10	11	12	13	14	15	13	14	15	16	17	18	19	13	14	15	16	17	18	19
16	17	18	19	20	21	22	20	21	22	23	24	25	26	20	21	22	23	24	25	26
23/30	24/31	25	26	27	28	29	27	28	—	—	—	—	—	27	28	29	30	31	—	—
APRIL							MAY							JUNE						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
—	—	—	—	—	—	1	1	2	3	4	5	6	7	—	—	—	1	2	3	4
3	4	5	6	7	8	9	8	9	10	11	12	13	14	5	6	7	8	9	10	11
10	11	12	13	14	15	16	15	16	17	18	19	20	21	12	13	14	15	16	17	18
17	18	19	20	21	22	23	22	23	24	25	26	27	28	19	20	21	22	23	24	25
24	25	26	27	28	29	30	29	30	31	—	—	—	—	26	27	28	29	30	—	—
JULY							AUGUST							SEPTEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
—	—	—	—	—	—	1	—	—	1	2	3	4	5	—	—	—	—	—	1	2
3	4	5	6	7	8	9	7	8	9	10	11	12	13	4	5	6	7	8	9	10
10	11	12	13	14	15	16	14	15	16	17	18	19	20	11	12	13	14	15	16	17
17	18	19	20	21	22	23	21	22	23	24	25	26	27	18	19	20	21	22	23	24
24/31	25	26	27	28	29	30	28	29	30	31	—	—	—	25	26	27	28	29	30	—
OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
—	—	—	—	—	—	1	—	—	—	1	2	3	4	—	—	—	—	—	1	2
2	3	4	5	6	7	8	6	7	8	9	10	11	12	4	5	6	7	8	9	10
9	10	11	12	13	14	15	13	14	15	16	17	18	19	11	12	13	14	15	16	17
16	17	18	19	20	21	22	20	21	22	23	24	25	26	18	19	20	21	22	23	24
23/30	24/31	25	26	27	28	29	27	28	29	30	—	—	—	25	26	27	28	29	30	31

1950 JANUARY							FEBRUARY							MARCH							APRIL						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7	—	—	—	1	2	3	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8	9	10	11	12	13	14	5	6	7	8	9	10	11	5	6	7	8	9	10	11	2	3	4	5	6	7	8
15	16	17	18	19	20	21	12	13	14	15	16	17	18	12	13	14	15	16	17	18	9	10	11	12	13	14	15
22	23	24	25	26	27	28	19	20	21	22	23	24	25	19	20	21	22	23	24	25	16	17	18	19	20	21	22
29	30	31	—	—	—	—	26	27	28	—	—	—	—	26	27	28	29	30	31	—	23/30	24	25	26	27	28	29
MAY							JUNE							JULY							AUGUST						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
—	—	1	2	3	4	5	—	—	—	—	1	2	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—
7	8	9	10	11	12	13	4	5	6	7	8	9	10	2	3	4	5	6	7	8	6	7	8	9	10	11	12
14	15	16	17	18	19	20	11	12	13	14	15	16	17	9	10	11	12	13	14	15	13	14	15	16	17	18	19
21	22	23	24	25	26	27	18	19	20	21	22	23	24	16	17	18	19	20	21	22	20	21	22	23	24	25	26
28	29	30	31	—	—	—	25	26	27	28	29	30	—	23/30	24/31	25	26	27	28	29	27	28	29	30	31	—	—
SEPTEMBER							OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
—	—	—	—	—	—	1	1	2	3	4	5	6	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3	4	5	6	7	8	9	8	9	10	11	12	13	14	5	6	7	8	9	10	11	3	4	5	6	7	8	9
10	11	12	13	14	15	16	15	16	17	18	19	20	21	12	13	14	15	16	17	18	10	11	12	13	14	15	16
17	18	19	20	21	22	23	22	23	24	25	26	27	28	19	20	21	22	23	24	25	17	18	19	20	21	22	23
24	25	26	27	28	29	30	29	30	31	—	—	—	—	26	27	28	29	30	—	—	24/31	25	26	27	28	29	30

ASTRONOMICAL DATA

The Sun

There are countless millions of far distant, superheated, self-luminous gaseous bodies called stars and each one is in itself a sun. Our Sun—the star around which our whole solar system revolves—is at a mean distance of 93,003,000 miles from the Earth, has a diameter of 865,390 miles, a surface temperature of about 11,000° F. and an interior temperature estimated at millions of degrees. It has a surface area approximately 12,000 times that of the Earth and in volume or bulk it is about 1,306,000 times the size of the Earth. It is, nevertheless, a star of only average size and temperature.

The Sun rotates on its axis and, by observation of Sun-spots (great whirling bodies in the Sun's atmosphere) and Faculae (bright streaks or areas on the Sun's surface), astronomers have discovered that the rotational speed varies from approximately 24½ days at its equator to approximately 34 days near its poles. The Sun is just one star of the great Milky Way Galaxy that is rotating on its galactic axis at a rate that gives the Sun a galactic

traveling speed of 175 miles per second. Furthermore, the Sun is moving toward a point known as "the apex of the Sun's way" in the constellation Hercules at a speed of about 12 miles per second.

What we see when we look at the Sun is the glowing surface called the Photosphere. Extending above this surface is the Sun's atmosphere consisting of two layers, one extending outward for a few hundred miles from the Sun's surface and called the Reversing Layer for spectroscopic reasons, the other an outer layer extending several thousand miles and called the Chromosphere because of its reddish color due mostly to superheated hydrogen, helium and calcium. Solar "prominences" occasionally burst out from this layer and extend hundreds of thousands of miles above the Sun's surface. Beyond these layers of solar atmosphere and extending to great height is the outermost observable solar feature, the magnificent Corona of exceedingly slight density that provides an awesome spectacle for observers during total eclipses of the Sun.

Morning and Evening Stars in 1949

MERCURY

Evening star, Jan. 1 to Feb. 2
Morning star, Feb. 2 to Apr. 13
Evening star, Apr. 13 to June 3
Morning star, June 3 to July 26
Evening star, July 26 to Oct. 3
Morning star, Oct. 3 to Nov. 21
Evening star, Nov. 21 to Dec. 31

VENUS

Morning star, Jan. 1 to Apr. 16
Evening star, Apr. 16 to Dec. 31

Mercury may be seen over the western horizon after sunset, for a week or more before and after each eastern elongation from the sun, and similarly over the eastern horizon before sunrise around each western elongation. (For elongation times, see Phenomena section.) At the Jan. and Feb. elongations Mercury is in Capricornus, near the ecliptic; at the May elongation, north of Aldebaran in Taurus; at the June elongation, n.e. of Aldebaran; at the Sept. elongation, south of the star Gamma Virginis; at the Oct. elongation, just west of Gamma Virginis.

Venus is visible in the west for many weeks around eastern elongation. In Jan. it is in Ophiuchus and Sagittarius in the morning sky; in Feb. it crosses Capricornus; in Mar. it crosses Aquarius and goes into Pisces; in Apr. it crosses Pisces and part of Aries; in May it goes from e. Aries to e. Taurus; in June it leaves Taurus

MARS

Evening star, Jan. 1 to Mar. 17
Morning star, Mar. 17 to Dec. 31

JUPITER

Morning star, Jan. 1 to July 20
Evening star, July 20 to Dec. 31

SATURN

Morning star, Jan. 1 to Feb. 21
Evening star, Feb. 21 to Sept. 2
Morning star, Sept. 2 to Dec. 31

and crosses Gemini. In July Venus crosses Cancer and part of Leo, going just n. of Regulus; in Aug. it is in s. Leo and w. Virgo; in Sept. it crosses Virgo n. of Spica and goes into central Libra; in Oct. it goes to the Ophiuchus-Sagittarius line; in Nov. it goes nearly across central Sagittarius; in Dec. it is in w. Capricornus.

Mars is in Capricornus in Jan; in Aquarius in Feb.; in Aquarius and Pisces in Mar.; in s. Pisces in Apr.; in Aries in May; in w. Taurus in June; in Taurus and w. Gemini in July; in Gemini in Aug.; in Cancer in Sept.; in w. Leo in Oct.; in s. Leo in Nov.; in Leo and Virgo in Dec. Neither Venus nor Mars retrogrades in 1949.

Jupiter is in Sagittarius, Jan. to Mar.; in w. Capricornus, Apr. to June; in Sagittarius, July to Nov.; and in Capricornus in Dec.

Saturn is in s. Leo the entire year, approximately east of Regulus.

The Brightest Stars

Star	Constellation	Position, 1950			Mag.	Dist.	On meridian 9 p. m.
		R.A.	Dec.				
		h	m	° ' "		l.-y.	
Sirius.....	Canis Major.....	6	42.9	-16 39	-1.6	8	Feb. 16
Canopus.....	Carina.....	6	22.8	-52 40	-0.9	650	Feb. 11
Alpha Centauri.....	Centaurus.....	14	36.2	-60 38	+0.1	4	June 16
Vega.....	Lyra.....	18	35.2	+38 44	0.1	23	Aug. 15
Capella.....	Auriga.....	5	13.0	+45 57	0.2	42	Jan. 24
Arcturus.....	Boötes.....	14	13.4	+19 27	0.2	32	June 10
Rigel.....	Orion.....	5	12.1	- 8 15	0.3	545	Jan. 24
Procyon.....	Canis Minor.....	7	36.7	+ 5 21	0.5	10	Mar. 2
Achernar.....	Eridanus.....	1	35.9	-57 29	0.6	70	Nov. 30
Beta Centauri.....	Centaurus.....	14	0.3	-60 8	0.9	130	June 7
Altair.....	Aquila.....	19	48.3	+ 8 44	0.9	18	Sept. 3
Betelgeuse.....	Orion.....	5	52.5	+ 7 24	0.9	300	Feb. 3
Aldebaran.....	Taurus.....	4	33.0	+16 25	1.1	54	Jan. 14
Spica.....	Virgo.....	13	22.6	-10 54	1.2	190	May 28
Pollux.....	Gemini.....	7	42.3	+28 9	1.2	31	Mar. 3
Antares.....	Scorpius.....	16	26.3	-26 19	1.2	170	July 14
Fomalhaut.....	Piscis Austrinus.....	22	54.9	-29 53	1.3	27	Oct. 20
Deneb.....	Cygnus.....	20	39.7	+45 6	1.3	465	Sept. 16
Regulus.....	Leo.....	10	5.7	+12 13	1.3	70	Apr. 9
Beta Crucis.....	Crux.....	12	44.8	-59 25	1.5	465	May 18
Eta Carinae.....	Carina.....	10	43.1	-59 25	1-7	...	Apr. 17
Alpha-one Crucis.....	Crux.....	12	23.8	-62 49	1.6	150	May 13
Castor.....	Gemini.....	7	31.4	+32 0	1.6	44	Feb. 28
Gamma Crucis.....	Crux.....	12	28.4	-56 50	1.6	...	May 15
Epsilon Canis Majoris.....	Canis Major.....	6	56.7	-28 54	1.6	325	Feb. 19
Epsilon Ursae Majoris.....	Ursa Major.....	12	51.8	+56 14	1.7	50	May 20
Bellatrix.....	Orion.....	5	22.4	+ 6 18	1.7	215	Jan. 27
Lambda Scorpii.....	Scorpius.....	17	30.2	-37 4	1.7	205	July 30
Epsilon Carinae.....	Carina.....	8	21.5	-59 21	1.7	325	Mar. 13
Mira.....	Cetus.....	2	16.8	- 3 12	2-9	250	Dec. 11
Epsilon Orionis.....	Orion.....	5	33.7	- 1 14	1.7	405	Jan. 29
Beta Tauri.....	Taurus.....	5	23.1	+28 34	1.8	115	Jan. 27
Beta Carinae.....	Carina.....	9	12.7	-69 31	1.8	...	Mar. 26
Alpha Trianguli Australis.....	Triangulum Australe.....	16	43.4	-68 56	1.9	130	July 18
Alpha Persei.....	Perseus.....	3	20.7	+49 41	1.9	190	Dec. 27
Eta Ursae Majoris.....	Ursa Major.....	13	45.6	+49 34	1.9	220	June 3
Gamma Geminorum.....	Gemini.....	6	34.8	+16 27	1.9	65	Feb. 14
Epsilon Sagittarii.....	Sagittarius.....	18	20.9	-34 25	1.9	165	Aug. 12
Alpha Ursae Majoris.....	Ursa Major.....	11	0.7	+62 1	1.9	90	Apr. 22
Delta Canis Majoris.....	Canis Major.....	7	6.4	-26 19	2.0	410	Feb. 22

Comets

In ancient times comets were supposed to be omens of sudden death, war, revolution or other dire events in human affairs and practically nothing was known of their true nature. They still offer puzzling problems to modern astronomers and, with about 1000 listed, new ones are being discovered and charted each year. In general, comets consist of a nucleus (sometimes lacking) surrounded by a head or "coma" (from the Greek word for hair because of its hazy appearance) from which extends the great tail that makes the passage of a comet through our skies such a striking spectacle. Comets come in varying sizes but the average diameter of the heads of a large number of observed comets is about

80,000 miles and the tail length may stretch out to more than 100,000,000 miles. The density of comets is so low, however, that we can see the stars through them and there is more actual material in one cubic inch of ordinary air than in 2000 cubic miles of the tail of a comet.

The luminous tails of comets were believed, for many centuries, to be merely clouds high in our atmosphere. Tycho Brahe, eccentric Danish astronomer, proved that the comet he observed in 1577 was a celestial object far beyond the limit of the Earth's atmosphere. But the great forward step in the study of comets came when Edmund Halley, who became England's Astronomer Royal, carefully observed a

comet in 1682, checked with previous observations, calculated its orbit and predicted its return to our skies in 1758 or 1759. Halley died in 1742 but the comet, now named after him, reappeared on schedule and a search through ancient records indicated that it had been observed in repeated appearances as far back as 240 B. C. Its last appearance was marked by its perihellion passage in 1910 and its next visit to our skies will occur in 1986. Halley's fulfilled prediction was the first definite proof that comets have regular orbits and time schedules or are, as the astronomers say, "periodic". The known "periods" (time intervals between appearances) of comets vary from the 3.3 years of Encke's Comet to thousands of years for wider travelers. No known bright comets are scheduled for appearance in our sky this year.

A curious thing about comets is that their tails always trail from the head in a direction away from the Sun, so that when a comet is moving away from the Sun, the tail stretches out in front of the head. A comet's tail is so tenuous as to be almost a vacuum. The Earth passed through the tail of Halley's Comet in May, 1910, and on that occasion astronomers heard nothing,

felt nothing and saw nothing to indicate that such passage had any observable effect on the Earth.

Twenty Famous Comets

Year and no.	Name of comet	Period
		years
1744	De Chéseaux's Comet.....	.....
1806	Biele's Comet.....	6.7
1811 I	Great Comet of 1811.....	3000
1812	Di Vico's Comet.....	70.7
1815	Olbers' Comet.....	74.0
1819 I	Encke's Comet.....	3.3
1819	Pons-Winnecke Comet.....	6.0
1835 III	Halley's Comet.....	76.3
1843 I	Great Comet of 1843.....	512.4
1844 II	Great Comet of 1844.....	102,050
1858 VI	Donati's Comet.....	2,040 (?)
1864 II	Great Comet of 1864.....	2,800,000
1871 III	Tuttle's Comet.....	13.8
1874 III	Coggia's Comet.....	6,000 (?)
1879	Brorsen's Comet.....	5.6
1881 II	Tebbutt's Comet.....	.....
1889 VI	Swift's 2nd Comet.....	7.0
1892 III	Holmes' Comet.....	6.9
1923	d'Arrest's Comet.....	6.6
1925 II	Comet Schwassmann-Wachmann..	16.2

The Polar Auroras

It has been definitely established that Sun-spots are the direct cause of the greatest electrical show on Earth, a double feature, the Aurora Borealis (Northern Lights) and the Aurora Australis (Southern Lights). Sun-spots are magnetic storms of vast dimensions on the surface of the Sun and they shoot out electrified particles into space. Those that come toward the Earth are drawn toward the Earth's magnetic poles and consequently these magnetic poles are the radiating centers of those spectacular electromagnetic displays in the sky that we commonly call the "Northern Lights" or the "Southern Lights", depending upon whether we see them in the northern or southern hemisphere. The electrical particles from the Sun-spots strike the upper regions of our atmosphere where the component gases (nitrogen, oxygen and extremely minor amounts of argon, helium, neon, hydrogen and carbon dioxide) are very much rarefied and cause them to vibrate and glow in colors characteristic of the various elements, just as a neon sign glows when an electric charge is passed through it. The Sun-spots that cause auroral displays also cause the magnetic storms that interfere with radio

reception, telephone, telegraph and cable traffic and other electromagnetic devices such as compasses and various aviation accessories.

There is an almost infinite variety to the auroral display. The lights may sweep across the sky in waves, in streamers or in folds like draped curtains. Or it may be a stationary glow. Sometimes there is little or no color in these waves, sheets or streamers of light. At other times the lights may be rich in red or green or pastel shades. Rose color and lavender and violet and purple are common. Blue is rare but has been seen. The "Northern Lights" have been seen as far south as New Orleans and the Florida peninsula and the "Southern Lights" have been seen as far north as New Zealand and Australia, but the maximum occurrence of these auroral displays is along the borders of the Arctic and Antarctic regions. Since these are atmospheric displays, our atmosphere must extend to the extreme height at which auroral lights are observed. Prof. Carl Störmer of the University of Oslo found this to be about 600 miles. He further found that no auroral lights came closer to the Earth's surface than 50 or 60 miles.

The Change of Seasons

It is enough to state that the Earth is nearer to the Sun in January than it is in July to convince those who live in the northern hemisphere that there must be some other explanation than that for the

seasonal changes on our globe. The reason for the change in seasons is that the axis of rotation of the Earth is tipped to the perpendicular of the plane of its orbit around the sun at an angle of approxi-

mately $23\frac{1}{2}$ degrees (more accurately, it varies in 1949 from $23^{\circ} 26' 53''$ to $23^{\circ} 26' 54''$) and consequently there is a proportional shifting of the angle of the Sun's rays falling on different portions of the Earth's surface at different times of year.

On or about June 21 the north end of the Earth's axis is tipped to its limit toward the Sun. In the northern hemisphere this is our Summer Solstice. We then have our longest days and receive a maximum of heat and light from the Sun whose perpendicular rays are falling on the Tropic of Cancer, $23\frac{1}{2}$ degrees north of the Equator. Six months later, on or about Dec. 21, the Earth has reached a position in its orbit that finds the north end of its axis tipped at its maximum away from the Sun. This is our Winter Solstice. We then have our shortest days and receive a minimum of heat and light from the Sun that is hovering over the Tropic

of Capricorn, $23\frac{1}{2}$ degrees south of the Equator. Conditions are reversed in the southern hemisphere for obvious reasons. Their Winter is our Summer; their Summer our Winter. Twice a year, at the equinoxes in March and September, the Sun is on the Equator, the day is of equal length all over the world and each hemisphere receives the same amount of light and heat from the rays of the Sun.

If the effect in the change of the angle of the Sun's rays on the Earth's surface were instantaneous, our coldest period would be at the Winter Solstice and our warmest period at the Summer Solstice, but due to the blanket of atmosphere around the Earth and the cumulative effect in the heating or cooling of the Earth's surface, we have "the lag of the seasons" that brings our warmest and coldest periods some five or six weeks after the Sun is "farthest north" or "farthest south".

The Seasons, 1949

(Eastern Standard Time)

	d	h	m	
Mar. 20	5	49	P.M.	Sun enters sign of Aries; spring begins in northern hemisphere.
June 21	1	3	P.M.	Sun enters sign of Cancer; summer begins in northern hemisphere.
Sept. 23	4	6	A.M.	Sun enters sign of Libra; autumn begins in northern hemisphere.
Dec. 21	11	24	P.M.	Sun enters sign of Capricornus; winter begins in northern hemisphere.

Planet Table

	Mean distance from sun in millions of miles	Period of revolution around the sun	Eccentricity of orbit	Inclination to ecliptic	Diameter	Period of rotation on axis	Inclination of equator to orbit plane	Surface gravity (earth =1)	Oblateness	Mean velocity in orbit	Max. stellar mag.
				° '	miles		°			mi./sec.	
Sun.....					865,390	$24^d.64^h$	7.2	28	0		-26.7
Moon.....		$(27^d.322)^*$	0.05	5 8	2,159.9	$27^d.322$	6.7	0.16	0	0.63	-12.6
Mercury.....	36.00	$87^d.969$	0.21	7 0	3,008.5	88^d	7	0.28	0	30	-1.2
Venus.....	67.27	$224^d.701$	0.01	3 24	7,575.4	$?^h$	?	0.85	0	22	-4.4
Earth.....	93.00	$365^d.256$	0.02	0 0	$7,926.7^s$	$23^h.56^m$	23.4	1.00	$1/297$	18.5	
Mars.....	141.71	$1^y.881$	0.09	1 51	4,215.6	$24^h.37^m$	25.2	0.38	$1/192$	15	-2.8
Jupiter.....	483.88	$11^y.862$	0.05	1 18	88,698 $\frac{1}{2}$	$9^h.50^m+$	3.1	2.6	$1/15$	8	-2.5
Saturn.....	887.14	$29^y.458$	0.06	2 29	75,060 $\frac{1}{2}$	$10^h.14^m+$	26.8	1.1	$1/9.5$	6	-0.4
Uranus.....	1784.82	$84^y.015$	0.05	0 46	30,878	10^h	98	0.9	$1/14$	4	+5.7
Neptune.....	2796.66	$164^y.788$	0.01	1 46	32,932	$15^h.8$	29	1.1	$1/40$	3	+7.6
Pluto.....	3669.66	$247^y.697$	0.25	17 9	5,900	??	??	??	??	<3	+14

*Period of revolution around the earth.

†This is the rotation at the equator.

‡Rotation of Venus is uncertain but is probably a few weeks.

§The equatorial diameters of the earth, Jupiter, and Saturn are given; polar diameters are: earth, 7900.0 mi., Jupiter 82,789 mi., Saturn 67,170 mi.

The Moon

The planet Mars has two tiny satellites or moons, Jupiter has eleven, Saturn nine, Uranus five and Neptune one. The Earth, like Neptune, has one satellite that is uniformly called The Moon. It is a globe of approximately 2160 miles in diameter with a surface deeply pitted by great craters. It has no atmosphere that astronomers can detect and shines only by re-

flected light of the Sun. Though it seems bright to us at "full moon", it reflects only about 7 percent of the light poured on it by the Sun.

The path of the Moon on its travels around the Earth is elliptical, with the Earth at one focus of the ellipse. The distance of the Moon from the Earth varies from 221,463 miles (perigee) to 252,710

miles (apogee), the average distance being 238,860 miles. The really curious thing about the Moon is that it revolves around the Earth in 27 days, 7 hours, 43 minutes, 11.47 seconds and rotates on its axis in exactly the same time, which is why we always see the same side of the Moon. Due to what are known as "librations in latitude and longitude" and also a "diurnal libration", we do see "around the edge of the Moon" at different times and in this manner a total of 59 percent of the Moon's surface has been observed, but the other 41 percent never has been seen by human eye.

Although the Moon revolves around the Earth in approximately $27\frac{1}{3}$ days, it is, on the average, a matter of $29\frac{1}{2}$ days (29 days, 12 hours, 44 minutes, 2.78 seconds) from

one New Moon to the other because the Earth is moving around the Sun while the Moon is moving around the Earth and the "New Moon" depends upon the relative positions of the three bodies. If the planes of orbit of the Earth and the Moon coincided, there would be an eclipse of the Moon at every "Full Moon" and an eclipse of the Sun at every "New Moon", but the (approximately) 5-degree angle between the planes of orbit of the Earth and the Moon causes the Moon on most of its revolutions to miss the Earth's shadow and the Moon's shadow on most trips to miss falling on the Earth. The tidal effects of the Moon are, of course, well known. The "Spring Tides" occur at "Full Moon" and "New Moon" and the "Neap Tides" at "First Quarter" and "Last Quarter".

Eclipses in 1949

(1) *A total eclipse of the moon, April 12-13*, visible in the United States and Canada. The beginning is visible in Africa, southwestern Asia, Europe, the Atlantic Ocean, the Arctic and Antarctic areas, North America (except the northwestern part), South America, and the eastern Pacific Ocean. The ending is visible in western Africa, southwestern Europe, the Atlantic Ocean, both polar regions, North and South America, and the eastern and middle Pacific. The earth's shadow at the maximum phase is 1.4 times the moon's diameter.

Phenomena of the eclipse

Moon enters	d	h	m
penumbra	April 12	8 31.6	P.M., E.S.T.
Moon enters umbra	12	9 27.7	
Total eclipse			
begins	12 10 28.0		
Mid-eclipse	12 11 10.9		
Total eclipse ends	12 11 53.8	P.M.	
Moon leaves umbra	13 0 54.1	A.M.	
Moon leaves			
penumbra	13 1 50.3	A.M.	

(2) *A partial eclipse of the sun, April 28*, invisible in the United States. The course of the middle line of the eclipse begins in French West Africa, and extends across the north Atlantic Ocean, Baffin Island, the Canadian northern archipelago, and the Arctic Ocean, ending in extreme northeast Asia. The maximum phase occurs in the southern part of Davis Strait, and here 0.6 of the sun's disc is obscured. Lesser phases are visible from most of northern Africa, Europe, northernmost Asia, and the Labrador coast.

(3) *A total eclipse of the moon, October 6-7*, visible in the United States and Canada. The beginning is visible in Africa, western Asia, Europe, the Atlantic Ocean, the Arctic and Antarctic areas, North America (except the northwestern and western areas), South America, and the southeastern Pacific Ocean. The ending is visible in western Africa, the greater part of Europe, the Atlantic Ocean, both polar regions, North and South America, and the eastern and central Pacific. The earth's shadow at the maximum phase is 1.2 times the moon's diameter.

Phenomena of the eclipse

Moon enters	d	h	m
penumbra	October 6	6 50.1	P.M., E.S.T.
Moon enters umbra	6 8 4.7		
Total eclipse begins	6 9 19.5		
Mid-eclipse	6 9 56.4		
Total eclipse ends	6 10 33.2		
Moon leaves umbra	6 11 48.1	P.M.	
Moon leaves			
penumbra	7 1 2.7	A.M.	

(4) *A partial eclipse of the sun, October 21*, invisible in North America. The course of the middle line of the eclipse begins in the Bismarck archipelago, east of New Guinea, and extends across east-central Australia, the Indian Ocean, and Antarctica, and ends in Drake Passage, east of Cape Horn, South America. The maximum phase occurs in the Antarctic Ocean off the Knox Coast, east of Queen Mary Land, Antarctica. Here the eclipse is nearly total, 0.96 of the sun's disc being obscured. Lesser phases are observable from eastern Australia, New Zealand, and the Antarctic archipelago.

Astronomical Constants

1 light-year	5,880,000,000,000 mi.
velocity of light	186,273 mi./sec.
astronomical unit or distance earth-to-sun	93,003,000 mi.
mean distance, earth to moon	238,860 mi.
general precession	50".26
obliquity of the ecliptic	23° 27' 8".26—0".4684(t—1900) *
equatorial radius of the earth	3963.34 statute mi.
polar radius of the earth	3949.99 statute mi.
earth's mean radius	3958.89 statute mi.
oblateness of the earth	$\frac{1}{297.0}$
equatorial horizontal parallax of the moon	57' 2".70
earth's mean velocity in orbit	18.5 mi./sec.
sidereal year	365 ^d .2564
tropical year	365 ^d .2422
sidereal month	27 ^d .3217
synodic month	29 ^d .5306
sidereal day	23 ^h 56 ^m 4 ^s .091 of mean-solar time
mean solar day	24 ^h 3 ^m 56 ^s .555 of sidereal time

*: refers to the year in question, for example 1948.

The Atmosphere

The atmosphere of the Earth—the blanket of air that surrounds our globe and is essential to life—is of interest to astronomers because of its effect on the light that comes to us from heavenly bodies. Air has weight and volume. It refracts (bends or changes the direction of) light rays that enter it. Due to this refraction, we are able to see the Sun and the Moon before they rise and after they set. The “twinkling” of the stars is caused by convection currents in the air that have a rapidly changing refractive effect on the light from the stars. Our twilight is produced by the diffusion in the atmosphere of light from the Sun when it is below the horizon. Meteors become visible when they are heated to incandescence by friction with the atmosphere when, from outer space, they plunge into it at terrific speed.

Prof. Carl Störmer of the University of

Oslo measured the height of the atmosphere and found it to be more than 600 miles, but about half of it by weight is below 18,000 feet. Although we may remark blandly that something is “as light as air”, the Earth’s atmosphere in bulk is of such enormous weight that at sea level it exerts a pressure of approximately 14.7 pounds per square inch. At higher levels, of course, the pressure is less.

Chemically, the atmosphere is composed of nitrogen (approximately 78 percent by volume), oxygen (approximately 21 percent by volume), and extremely minor amounts (about 1 percent in all by volume) of argon, neon, helium, hydrogen and carbon dioxide. There is also present in the air a varying amount of water vapor, which is commonly complained of as “humidity” when the percentage is high in warm weather.

Important Meteor Showers

Date	Meteor stream	Radiant in constellation
Jan. 1-4	Quadrantids.....	Boötes
Feb. 5-10	Alpha Aurigids.....	Auriga
Mar. 10-12	Zeta Boötids.....	Boötes
Apr. 19-23	Lyrids.....	Hercules
May 1-6	May Aquarids.....	Aquarius
May 30	Eta Pegasids.....	Pegasus
June 27-30	Pons-Winnecke meteors.....	Draco
July 14	Alpha Cygnids.....	Cygnus
July 26-31	Delta Aquarids.....	Aquarius
Aug. 10-14	Perseids.....	Cassiopeia
Aug. 10-20	Kappa Cygnids.....	Cygnus
Aug. 21-31	Zeta Draconids.....	Draco
Sept. 22	Alpha Aurigids.....	Auriga
Oct. 2	Quadrantids.....	Boötes
Oct. 9	Giacobinids.....	Draco
Oct. 18-23	Orionids.....	Orion
Nov. 14-18	Leonids.....	Leo
Dec. 10-13	Geminids.....	Gemini

Meteors and Meteorites

Meteorites are meteors that have come down to Earth. Meteors are masses of mineral or metal or both that plunge into the Earth’s atmosphere at great speed and become incandescent from the resultant friction so that they are seen in the sky as “fireballs” (bolidés) or “shooting stars”. The “fireballs” are the larger, make a greater flash across the sky and sometimes explode. Meteors come in all sizes but most of them verge on the microscopic and burn up completely in the flash that makes them visible from 40 to 60 miles above the Earth’s surface. Millions of them enter our atmosphere every twenty-four hours and probably not more than one or two a day survive to strike the ground as meteorites.

The largest meteorite ever found is located near Grootfontein, Southwest Africa, and its weight is estimated between 50 and

tons. The second largest meteorite (the Enghien, weight 36½ tons) was found by Admiral Peary, Arctic explorer, at Cape York, Greenland, and is now on exhibition at the Hayden Planetarium, New York City. The largest meteorite found on United States soil is the Willamette (weight 15½ tons), which fell near Portland, Oreg., and is now in the American Museum of Natural History, New York City.

Craters produced by the fall of meteorites have been found in many countries. The first to be recognized and the largest known is Meteor Crater in Arizona, a depression about 4,000 feet in diameter, about 600 feet deep, and with exterior walls rising 100 feet above the surrounding plain. Me-

teor craters have been found near Odessa, Texas; Haviland, Kansas; in the Arabian Desert; in Central Australia and—a notable group of fifty or more—in the region of the Stony Tunguska River in northern Siberia.

Many meteors travel in swarms, believed in some cases to be disintegrated comets. The Perseid shower that occurs annually Aug. 10-14 is thought by some astronomers to be all that remains of Tuttle's Comet and the Leonid shower, which reaches a maximum in mid-November every 33 years, similarly is suspected of being what is left of Tempel's Comet. The Leonid shower of 1833 was the greatest meteor display of which astronomers have record.

Projection Planetaria

Dr. Robert G. Aitken, Director Emeritus of the Lick Observatory, called the Zeiss projector in planetarium use "the most remarkable instrument that has ever been devised to exhibit impressively, and with the illusion of reality, the motions of the heavenly bodies and the phenomena that result from these motions". The first of these projectors was invented and developed by Dr. Walter Bauersfeld at the Carl Zeiss plant at Jena, Germany, and the first planetarium in which it was put to use was in the Deutsches Museum in Munich, May, 1925. Between that time and the outbreak of World War II, twenty-seven other Zeiss Projectors were constructed and shipped for use in planetaria spread around the world. Five planetaria for the use of the Zeiss Projector were erected in the United States. There were also Zeiss projector planetaria in Vienna, The Hague, Brussels, Stockholm, Moscow, Paris, Milan, Rome, Tokyo and Osaka. Some smaller

planetaria, with other projectors, have been built and are in operation in various places in the United States and Canada.

The Zeiss Projector planetaria in the United States are, in the order in which they were built:

Adler Planetarium, 900 E. Achsah Bond Drive, Chicago 5, Ill.

Director, Wagner Schlesinger.

Fels Planetarium, 20th St., Benjamin Franklin Parkway, Philadelphia 3, Pa.

Director, Roy K. Marshall.

Griffith Planetarium, P.O. Box 9866, Los Feliz Station, Los Angeles 27, Calif.

Director, Dinsmore Alter.

Hayden Planetarium, 81st St., Central Park West, New York 24, N. Y.

Director, Gordon A. Atwater.

Buhl Planetarium, Federal and West Ohio St., Pittsburgh 12, Pa.

Director, Arthur L. Draper.

Notable Telescopes of the World

Refractor Telescopes

Observatory	Location
Yerkes	Williams Bay, Wis.
Lick	Mt. Hamilton, Calif.
Paris (Univ. of)	Meudon, France
Astrophysical	Potsdam, Germany
Allegheny	Pittsburgh, Pa.
Bischoffsheim	Nice, France
Pulkova	Leningrad, U. S. S. R.

Reflector Telescopes

Palomar	Palomar Mt., Calif.
Mt. Wilson	Pasadena, Calif.
McDonald	Mt. Locke, Texas
Dunlap	Richmond Hill, Ont.
Lord Ross (dismantled)	Parsonstown, Eire
Dominion Astrophysical	Victoria, B. C.
Perkins	Delaware, Ohio
Harvard	Oak Ridge, Mass.
Bloemfontein	Bloemfontein, U. of S. Af.
Mt. Wilson	Pasadena, Calif.
Cordoba	Bosque Alegre, Argentina

Astronomical Photography

Since almost all astronomical research is now carried on by photographing the heavenly bodies, cameras and telescopes designed for this purpose are of the utmost importance.

What many astronomers consider the greatest advance in the making of astronomical instruments in the last fifty years was the production of the Schmidt Camera. The details of construction and method of operation of this camera were made known in 1930 by Bernhard Schmidt of the Hamburg Observatory at Bergedorf, Germany. The Schmidt Camera takes photographs with large fields of vision and sharp definition at much greater speed than was possible with earlier apparatus. Schmidt Cameras as fast as f/0.6 have been made, and those with a speed of f/1 are common. These remarkable cameras have been installed at many observatories in various parts of the world.

Symbols

- ☉ the sun ☿ Jupiter ☿ occultation
 ☾ the moon ♄ Saturn ☿ opposition
 ☿ Mercury ♅ Uranus ● new moon
 ♀ Venus ♃ Neptune ♄ first quarter
 ⊕ the earth ♇ Pluto ○ full moon
 ♂ Mars ☿ conjunction ☾ last quarter

Signs of the Zodiac

and average date of sun entering

1. ♈ Aries, the Ram, Mar. 21
 2. ♉ Taurus, the Bull, Apr. 20
 3. ♊ Gemini, the Twins, May 21
 4. ♋ Cancer, the Crab, June 21
 5. ♌ Leo, the Lion, July 23
 6. ♍ Virgo, the Virgin, Aug. 23
 7. ♎ Libra, the Balance, Sept. 23
 8. ♏ Scorpius, the Scorpion, Oct. 23
 9. ♐ Sagittarius, the Archer, Nov. 22
 10. ♑ Capricornus, the Goat, Dec. 22
 11. ♒ Aquarius, the Water-bearer, Jan. 2
 12. ♒ Pisces, the Fishes, Feb. 19

Phenomena, 1949 (Eastern Standard Time)

January

- d h m
 2 — — — ☿ on meridian, 11 p.m., L.C.T.
 3 9 — — a.m. The earth in perihelion
 7 1 — — p.m. ☿ ♄ ☿, ♄ 48' south of ☿
 9 3 — — a.m. Titan, e. elongation from ♄
 17 10 — — p.m. ♄, greatest elongation e., 18°45' from ☉
 20 5 44 a.m. ☿ ♄ ☿, ♄ 18' n. of ☿
 26 3 — — a.m. ☿ ♄ ☿, ♄ 1' s. of ☿
 28 — — — ♄ on meridian, 2 a.m., L.C.T.

February

- 1 — — — ☿ on meridian, 9 p.m., L.C.T.
 11 — — — ♄ on meridian, 1 a.m., L.C.T.
 13 5 1 p.m. ☿ ♄ ☿, ♄ 2°34' s.
 15 8 5 p.m. ☿ on celestial equator
 20 5 29 a.m. ☿ ☿ Scorpii, Wash., D.C.; emer. 6:52
 23 5 54 p.m. ☿ ☿ ☿, ☿ 5°3' n.
 26 10 2 a.m. ☿ ☿ ☿, ☿ 3°35' n.
 28 0 — — a.m. ♄, greatest elongation w., 27°0' from ☉

March

- 3 — — — ☿ on meridian, 7 p.m. L.C.T.
 13 0 54 a.m. ☿ ♄ ☿, ♄ 2°41' s.
 15 10 40 p.m. ☿ ♄ ☿, ♄ 39' n.
 23 8 54 a.m. ☿ ☿ ☿, ☿ 5°11' n.
 25 — — — ♄ on meridian, 10 p.m., L.C.T.
 29 1 39 a.m. ☿ on celestial equator
 30 8 33 p.m. ☿ on ecliptic, ascending node

April

- 4 8 39 p.m. ☿ ☿ ☿, ☿ 4°26' s.
 9 8 26 a.m. ☿ ♄ ☿, ♄ 2°51' s.
 9 — — — ♄ on meridian, 9 p.m., L.C.T.
 16 1 36 a.m. ☿ Antares, Wash., D.C.; emer. 2:50
 17 10 54 p.m. ☿ at maximum declination, —28°18'31"
 19 10 15 p.m. ☿ ☿ ☿, ☿ 5°11' n.
 24 5 — — a.m. 4 Galilean moons of ☿ all on e. side
 26 — — — ☿ on meridian, 6 a.m., L.C.T.

May

- 6 3 20 p.m. ☿ ♄ ☿, ♄ 2°53' s.
 9 3 18 a.m. ☿ on celestial equator
 9 4 33 p.m. ☿ ♄ Aldebaran, ♄ 8°5' n.
 9 5 29 p.m. ☿ ♄ ☿, ♄ 32' n.
 9 — — — ♄ on meridian, 7 p.m., L.C.T.
 10 3 — — p.m. ♄, greatest elongation e., 21°32' from ☉
 12 — — — ☿ on meridian, 5 a.m., L.C.T.
 26 10 44 a.m. ☿ ☿ ☿, ☿ 2°29' s.

June

- 2 10 33 p.m. ☿ ♄ ☿, ♄ 2°44' s.
 6 0 19 a.m. ☿ ☿ ☿, ☿ 36' n.
 9 9 38 p.m. ☿ Antares, Wash. D.C.; emer. 10:36
 11 — — — ☿ on meridian, 3 a.m., L.C.T.
 18 9 46 p.m. ☿ on celestial equator
 23 7 59 p.m. ☿ ☿ Aldebaran, ☿ 5°39' n.
 24 8 8 a.m. ☿ ☿ Castor, ☿ 8°52' s.
 26 9 44 a.m. ☿ ☿ Pollux, ☿ 5°23' s.

July

- d h m
 2 4 — — p.m. The earth in aphelion
 10 8 34 p.m. ☿ ☿ ☿, ☿ 4°37' n.
 11 0 — — a.m. ☿ ♄ ☿, ♄ 54' s.
 25 9 20 a.m. ☿ ☿ Regulus, ♄ 1°9' n.
 27 3 — — a.m. ☿ ☿ ☿, ☿ 16' n.
 27 7 47 p.m. ☿ ♄ ☿, ♄ 2°7' s.
 29 7 45 p.m. ☿ on celestial equator
 31 1 — — a.m. ☿ ☿ ♄, ♄ 10' s.

August

- 4 11 15 p.m. 4 Galilean moons of ☿ all on e. side
 17 — — — ☿ on meridian, 10 p.m., L.C.T.
 19 10 3 p.m. ☿ ☿ ☿, ☿ 4°45' s.
 23 9 11 p.m. ☿ ☿ Castor, ☿ 9°24' s.
 26 8 58 a.m. ☿ ☿ ☿, ☿ 23' s.
 26 9 58 a.m. ☿ ☿ ☿, ☿ 23' s.
 26 9 1 p.m. ☿ ♄ ☿, ♄ 1°21' n.
 27 7 49 p.m. ☿ ☿ Pollux, ☿ 5°55' s.

September

- 1 3 — — a.m. ☿ ♄ ☿, ♄ 1°23' s.
 7 6 — — p.m. ♄, greatest elongation e., 26°59' from ☉
 8 1 6 a.m. ☿ ☿ Spica, ♄ 2°6' n.
 8 6 5 p.m. ☿ on celestial equator
 12 4 — — p.m. ☿ ♄ ☿, ♄ 5°6' s.
 15 — — — ☿ on meridian, 8 p.m., L.C.T.
 16 5 18 a.m. ☿ at max. declination, +28°30'57"
 18 9 30 p.m. 4 Galilean moons of ☿ all on w. side

October

- 13 12 10 p.m. ☿ at max. dec. for 1949, +28°33'36"
 17 — — — ☿ on meridian, 6 p.m., L.C.T.
 17 8 24 p.m. ☿ ☿ Antares, ♄ 2°1' n.
 19 4 — — a.m. ♄, greatest elongation w., 18°14' from ☉
 24 2 46 p.m. ☿ ☿ Regulus, ☿ 1°16' n.
 25 8 — — a.m. ☿ ♄ ☿, ♄ 34' n.
 26 1 55 a.m. ☿, max. declination s., —28°32'27"
 27 3 32 p.m. ☿ ☿ ☿, ☿ 4°45' n.

November

- 7 7 — — p.m. 4 Galilean sat. of ☿ all on w. side
 9 9 8 p.m. ☿ ☿ ☿, ☿ 4°51' s.
 14 7 52 p.m. ☿ ☿ ☿, ☿ 1°24' s.
 15 8 31 a.m. ☿ ♄, Wash., D.C.; emer. 9:41
 16 7 — — a.m. Titan, w. elongation from ♄
 20 1 — — p.m. ☿, greatest elongation e., 47°15' from ☉
 23 2 10 p.m. ☿ ☿ ☿, ☿ 2°0' n.
 30 4 — — p.m. ☿ ☿ ♄, ♄ 9' n.

December

- 6 10 — — p.m. ☿ ☿ ☿, ☿ 2°2' s.
 13 3 43 a.m. ☿ ☿ ☿, ☿ 33' n.
 17 6 — — p.m. 4 Galilean sat. of ☿ all on e. side
 18 6 — — a.m. Titan, w. elongation from ♄
 22 6 5 p.m. ☿ ☿ ☿, ☿ 3°41' n.
 26 7 25 p.m. ☿ on celestial equator
 26 10 — — a.m. ♄, greatest brilliancy

CHRONOLOGY



GREAT HISTORICAL EVENTS

Compiled by

ENCYCLOPAEDIA BRITANNICA

Before the Christian Era—(B. C.)

- 00-4000—Advanced stage of civilization in Egypt and Mesopotamia.
- 00 (?)—Indo-Europeans invade northern Greece.
- 00-1300—Rivalry between Assyria and Babylonia for control of western Asia.
- 00 (?)—Moses leads Jews out of Egypt.
- 94-1184 (?)—Trojan War: Greeks emerge supreme after legendary siege of Troy.
- 53—Legendary founding of Rome by Romulus.
- 500-400—Rise of Maya civilization in Mexico.
- 499-479—Persian Wars: Persians, in expeditions against Greece, fail in efforts at subjugation.
- 431-404—Peloponnesian War: Spartans, under Lysander, take Athens to become supreme in Greece.
- 390—Barbarian Gauls sack Rome.
- 340—Rome assumes ascendancy over towns of Italy.
- 334-330—Alexander the Great conquers Greece, Persia, Egypt, and part of India.
- 64-146—Punic Wars: Romans, in campaigns against Carthaginians, seize Sicily and Spain and destroy Carthage (later rebuilt by Romans, destroyed by Arabs in 698 A.D.)
- 58-51—Caesar defeats Gauls and Germans.
- 45—Caesar becomes dictator for life.
- 44—Caesar assassinated. Mark Antony seizes Rome.
- 31—Octavius defeats Antony, conquers Egypt.
- 30—Suicides of Antony and Cleopatra.
- 27—Octavius becomes Emperor Augustus; Roman Empire established.
- 4 (?)—Birth of Christ (according to many historians).

The Christian Era—(A. D.)

- 29 (?)—Crucifixion of Christ.
- 78—Agricola conquers Britain.
- 247—Goths begin invasion of Europe.
- 306—Constantine the Great, first Christian Emperor, defeats the Franks.
- 330—Constantine makes Constantinople the seat of the Roman Empire.
- 400—Goths under Alaric invade Italy.
- 410—Sack of Rome by Alaric.
- 451—Battle of Châlons: Huns under Attila defeated by Romans.
- 476—Fall of Rome; traditional date dividing ancient and medieval history.
- 622—Hegira (flight of Mohammed from Mecca). After Mohammed's death in 632, Moslems sweep over much of western Asia and northern Africa.
- 711—Moslems cross into Spain.
- 732—Charles Martel defeats Moslems in Battle of Tours (or Poitiers).
- 800—Charlemagne crowned first emperor of Holy Roman Empire; Christianity established over much of Europe.
- 1066—Battle of Hastings: William the Conqueror successfully invades England.
- 1096-1291—The Crusades: European Christians, in seven periods of conflict, oppose the Moslems and Turks, developing commerce and extending Christianity.
- 1206—Mongolian Empire established by Genghis Khan.
- 1215—Magna Carta proclaimed.
- 1260-92—Kublai Khan establishes sovereignty in China.
- 1338-1453—Hundred Years' War: England loses lands in France.
- 1431—Joan of Arc burned at the stake.
- 1453—Turks capture Constantinople.
- 1455-85—Wars of the Roses: House of York against House of Lancaster; Richard III slain at Battle of Bosworth Field (1485); Tudor line started by Henry VII.

- 1492—Moors driven out of Spain. Christopher Columbus discovers America (West Indies).
- 1517—Beginning of Reformation in Germany.
- 1558—Elizabeth becomes queen of England.
- 1571—Battle of Lepanto: Don John of Austria routs Turkish fleet.
- 1588—Spanish Armada destroyed by British.
- 1607—Jamestown, Va., settled by English under Capt. John Smith.
- 1618-48—Thirty Years' War: England, Holland, France, Sweden and German Protestants against Spain, Italy and German Catholics; Peace of Westphalia ends conflict, Alsace going to France, Swiss independence being recognized, and German secularized states being given religious freedom.
- 1619—First representative assembly in America at Jamestown, Va. First Negro slaves land at Jamestown from Dutch ship.
- 1620—Pilgrims land at Plymouth Rock.
- 1642-52—Great Rebellion: civil wars in England lasting from 1642 to 1646 and from 1648 to 1652; Charles I executed; Oliver Cromwell establishes commonwealth.
- 1644—Manchu Dynasty established in China, lasting until 1912.
- 1660—Monarchy restored in England under Charles II.
- 1665—The Great Plague in London.
- 1704—British capture Gibraltar from Spain.
- 1707—Scotland and England united.
- 1709—Battle of Poltava: Russians under Peter the Great defeat Swedes under Charles XII.
- 1756-63—Seven Years' War: France, Austria, Sweden, and Russia against England and Prussia; Clive defeats French at Battle of Plassey (1757), marking beginning of British supremacy in India; England wins Canada; Prussia retains Silesia. (American phase known as French and Indian War—1754-60).
- 1765—Stamp Act passed by British Parliament; Stamp Act Congress in New York threatens boycott unless repealed.
- 1770—The Boston Massacre (March 5).
- 1773—Boston Tea Party (Dec. 16).
- 1774—First Continental Congress, Philadelphia (Sept. 5).
- 1775-83—American Revolution. Outstanding events: 1775—Battle of Lexington-Concord (April 19). Battle of Bunker Hill (June 17). 1776—Declaration of American Independence (July 4). Battle of Long Island (Aug. 27). 1777—Congress adopts Stars and Stripes (June 14). Battle of Brandywine (Sept. 11). Battle of Germantown (Oct. 4). Burgoyne surrenders at Saratoga (Oct. 17). 1778—Battle of Monmouth (June 28). Capture of Kaskaskia (July 4). 1779—Battle of Savannah (Oct. 8-9). 1780—Major André hanged as spy (Oct. 2). Battle of King's Mountain (Oct. 7). 1781—Battle of Cowpens (Jan. 17). Battle of Yorktown (Sept. 28-Oct. 19) and British surrender by Lord Cornwallis. 1783—Peace treaty signed by U. S. and Great Britain (Sept. 3).
- 1787—U. S. Constitution drawn up at Philadelphia (May 14).
- 1789—First U. S. Congress meets in New York City (Mar. 4); first session begins (April 6). Washington elected first President (April 6) and is inaugurated (April 30).
- 1789-99—French Revolution. Outstanding events: 1789—Bastille destroyed (July 14). 1792—War with Prussia. France declared republic (Sept. 21). 1793—Louis XVI and Queen Marie Antoinette beheaded. Beginning of Reign of Terror. 1795—Napoleon Bonaparte heads army. Peace with Prussia. Directory established (Oct. 27). (Revolution merges into Napoleonic Wars.)
- 1792—Trial of Warren Hastings, British administrator in India.
- 1796-1815—Napoleonic Wars. Outstanding events: 1796—War in Italy. 1798—Campaign in Egypt. 1799—Napoleon made first Consul of French republic. 1804—Napoleon crowned emperor (Dec. 2). 1805—Nelson defeats French in Battle of Trafalgar (Oct. 21). French defeat Russians and Austrians in Battle of Austerlitz (Dec. 2). 1812—French defeat Russians in Battle of Borodino (Sept. 7). 1813—French defeated in Battle of Leipzig (Oct. 16-19). 1814—Napoleon abdicates (April 11), sent to Elba. Louis XVIII becomes King of France. First Treaty of Paris (May 30). 1815—Napoleon flees Elba (Feb. 26). Conclusion of Congress of Vienna (June 9). Napoleon defeated in Battle of Waterloo (June 18). Second Treaty of Paris (Nov. 20).
- 1800—Britain and Ireland united.
- 1803—Louisiana Purchase.
- 1804-06—Journey of Lewis and Clark overland to U. S. Northwest.
- 1812-14—War of 1812. Outstanding events: 1812—Declaration of War by U. S.

- (June 18). Fort Dearborn (Chicago) Massacre by Indian allies of British (Aug. 15). Detroit surrenders to British (Aug. 15). 1814—British burn White House at Washington. Battle of Plattsburgh won by Americans (Sept. 11). U. S. signs treaty with Britain at Ghent, Belgium (Dec. 24). 1815—Battle of New Orleans (Jan. 8). (Slowness of communications was responsible for continuation of hostilities after treaty).
- 1815—Holy Alliance formed (Sept. 26) by Russia, Austria and Prussia; intended to regulate government according to Christianity but was used for repressing political liberty.
- 1819—Florida purchased from Spain.
- 1820—Missouri Compromise permits slavery in that state.
- 1823—Monroe Doctrine proclaims that no European power may seize territory or set up a government on American continents.
- 1830—Revolt in France; Charles X flees; Louis Philippe becomes king.
- 1832—South Carolina nullifies U. S. protective tariff law.
- 1836—Battle of the Alamo (March 6): Texas declares its independence from Mexico.
- 1846-48—Mexican War: boundary dispute between U. S. and Mexico; by Treaty of Guadalupe Hidalgo (1848), Mexico cedes Calif., Nev., and Utah to U. S.; Texas boundary set at Rio Grande.
- 1848—French depose Louis Philippe, set up Second Republic under Louis Napoleon. *Communist Manifesto* issued by Marx and Engels.
- 1852—Louis Napoleon sets up second empire and takes title of Napoleon III.
- 1853-56—Crimean War: Russia loses claim to Greek Christians under Turkish flag.
- 1857—Dred Scott decision of U. S. Supreme Court (March 6) holds that a Negro slave is not a citizen.
- 1858—Lincoln-Douglas debates in Illinois.
- 1859—John Brown's raid on Harpers Ferry (Oct. 16).
- 1860—South Carolina secedes from the Union (Dec. 20).
- 1861—Seceding states proclaim Confederacy; Jefferson Davis named president (Feb. 9). First Italian parliament (Feb. 18); Victor Emmanuel made king. Serfdom abolished in Russia.
- 1861-65—American Civil War. Outstanding events: 1861—Battle of Bull Run (July 21). 1862—Battle of *Monitor* and *Merrimac* (March 9). Battle of Shiloh (April 6-7). Seven Days battle (June 26-July 2). Battle of Antietam Creek (Sept. 16-17). 1863—Lincoln's Emancipation Proclamation (Jan. 1). Battle of Chancellorsville (May 2-4). Battle of Gettysburg (July 1-3). Grant captures Vicksburg (July 4). Battle of Chickamauga (Sept. 19-20). Battle of Lookout Mountain (Nov. 24-25). 1864—Battle of Wilderness (May 5-6). Battle of Spotsylvania (May). Sherman's march through Georgia (ended Dec. 20). 1865—Lee surrenders at Appomattox (April 9).
- 1864—International Working Men's Association (First International) founded in London.
- 1865—Lincoln shot by John Wilkes Booth (April 14, dies April 15).
- 1867—Alaska bought from Russia by U. S.
- 1869—Central Pacific and Union Pacific rail lines joined near Ogden, Utah (May 10), completing first transcontinental railroad.
- 1870-71—Franco-Prussian War: ends with Treaty of Frankfurt (May 10, 1871).
- 1873—Financial panic in New York.
- 1876—Battle of the Little Big Horn in Montana: massacre of General Custer's forces by the Sioux (June 25).
- 1877-78—Russo-Turkish War: power of Turkey in Europe broken; redivision of southeastern Europe at Congress of Berlin (June 13-July 13, 1878).
- 1881—Alexander II of Russia assassinated by nihilists (March 13). President Garfield fatally shot (July 2, dies Sept. 19).
- 1883—Pendleton Act establishes Civil Service Commission and merit system.
- 1889—Second International formed in Paris.
- 1894-95—Chinese-Japanese War: Japan wins Formosa.
- 1898—Spanish-American War. Outstanding events: U. S. battleship *Maine* blown up in Havana harbor (Feb. 15). Dewey destroys Spanish fleet at Manila (May 1). Charge of San Juan Hill (July 1). Cervera's fleet destroyed off Santiago, Cuba, by U. S. ships (July 3). Treaty of Paris signed (Dec. 10) with Spain ceding the Philippines and Puerto Rico.
- 1899-1902—Boer (South African) War: resistance of Dutch to British government in Transvaal; Boers defeated and sign peace treaty at Pretoria (May 31, 1902).
- 1899—Filipinos revolt (Feb. 4); U. S. forces capture rebel leader, Aguinaldo (March 23, 1901).
- 1900—Boxer uprising in China against foreigners and Chinese Christians; foreign legations at Peiping besieged.

- 1901—President McKinley fatally shot (Sept. 6, dies Sept. 14).
- 1904-05—Russo-Japanese War: result of conflicts in Manchuria; Port Arthur surrenders to Japanese (Jan. 2, 1905); after Treaty of Portsmouth (Sept. 5, 1905), Japan emerges as major power.
- 1912—Republic established in China (Feb. 12).
- 1912-13—Balkan Wars: Bulgaria, Serbia, Greece, and Montenegro allied successfully against Turkey; later Bulgaria attacks Serbia and Greece and is defeated.
- 1914—U. S. troops land at Veracruz, Mexico, and occupy city for several months. Archduke Francis Ferdinand of Austria assassinated (June 28) at Sarajevo by Serbs, precipitating World War I.
- 1914-18—World War I: Central Powers (Austria-Hungary, Germany, Bulgaria and Turkey) against the Allies (United States, Great Britain, France, Russia, Belgium, Serbia, Greece, Rumania, Montenegro, Portugal, Italy and Japan). Outstanding events: 1914—Austria declares war on Serbia (July 28). Germany declares war on Russia (Aug. 1) and France (Aug. 3). Germans invade Belgium (Aug. 4). Britain declares war on Germany (Aug. 4). Germans defeat Russians at Tannenberg, East Prussia (Aug. 31). First Battle of the Marne (Sept. 6-9). 1915—German U-boat blockade of Great Britain begins. Dardanelles campaign against Turkey fails. 1916—Battle of Jutland (May 31). Battles of the Somme (July-Nov.). Germans turned back at Verdun (Sept. 3). Rumania overrun by Central Powers; fall of Bucharest (Dec. 6). 1917—Germany begins unrestricted submarine warfare. U. S. declares war (April 6). First U. S. troops in France (June 26). British capture Jerusalem (Dec. 9). Battle of Caporetto ends (Dec. 19). 1918—President Wilson's Fourteen Points of Peace speech (Jan. 8). Battle of the Somme (March 21-April 6). Battle of the Aisne (May 27-June 5). Second Battle of the Marne (July 15-Aug. 4). U. S. troops take St. Mihiel (Sept. 13). Battle of the Meuse-Argonne (Sept. 20-Nov. 11). Allies break Hindenburg line (Oct. 5). Armistice signed (Nov. 11).
- 1917—First phase of Russian Revolution (Mar.): Tsar abdicates (Mar. 15) and is imprisoned; second phase of Revolution (Nov. 7): provisional government of Kerensky is overthrown. Balfour declaration (Nov. 2) on Jewish homeland in Palestine.
- 1918—Tsar Nicholas II and his family shot by Bolsheviks (July 16).
- 1919—The Third International (organization of Communist parties of all nations) founded at Moscow (March). Treaty of Versailles signed (June 28); U. S. Senate refuses to ratify treaty (Nov. 19).
- 1920—League of Nations comes into existence (Jan. 10). National Prohibition goes into effect (Jan. 20). Woman suffrage amendment ratified (Aug. 26).
- 1921—Resolution declaring peace with Germany and Austria signed by Harding (July 2). Conference for limitation of armaments meets in Washington, D.C. (Nov. 12).
- 1922—Irish Free State established (Jan. 15). Treaty for limitation of naval armaments concluded at Washington by U. S., Britain, France, Italy and Japan (Feb. 6). First session of World Court (June 15). Fascist coup in Italy; Mussolini forms cabinet (Oct. 31).
- 1923—French begin occupation of Ruhr (to 1925). World Court Protocol rejected by U. S. Senate (Mar. 3). Munich beer hall putsch led by Hitler put down (Nov. 8-9).
- 1924—Teapot Dome oil scandals. Death of Lenin (Jan. 21). Dawes Plan presented (April 9) to stabilize German currency and regulate annual payments of reparations.
- 1925—Bryan and Darrow in Scopes evolution trial in Tennessee (July). Locarno Conference held (Oct.) to insure peace and preserve boundaries.
- 1926—World Court membership approved by U. S. (Jan. 27) with reservations; reservations rejected by Court. General strike in Britain (Apr.-Dec.).
- 1927—Record floods in Mississippi and tributary valleys (Apr.-May). Lindbergh flies solo across Atlantic (May 20-21). Sacco and Vanzetti executed (Aug. 23).
- 1928—Kellogg Peace Pact signed (Aug. 27); 15 nations outlaw war. First Five-Year Plan inaugurated in U.S.S.R. (Oct. 1).
- 1929—Lateran Treaty signed (Feb. 11), establishing Vatican City State. Young Plan completed (June 7) for payment of German reparations. New York stock market collapses (Oct. 29); depression begins.
- 1930—Navy pact signed by U. S., Britain, Japan, France and Italy (April 22). Hawley-Smoot Tariff signed by Hoover (June 17). Revolutions in Argentina (Sept. 6) and Brazil (Oct. 24).

HEADLINES OF THE YEARS

1931-1947

Compiled by

THE NEW YORK HERALD TRIBUNE

- 1931** All the world was restless. Rioting in Cuba and Spain, revolutionary rumblings in South and Central America (the Marines were in Nicaragua), Fascist bluster in Italy told of world-wide ferment in economics and politics. Here in the U. S. the Depression deepened. A worried President summoned groups of anxious businessmen to the White House; neighborhood soup kitchens were set up to feed the hungry. Christmas shoppers looked away as they passed jobless, shivering men selling apples on street corners. A song that caught the imagination was "Brother, Can You Spare a Dime?" The answer, as 1931 began, was generally "No."
- Jan.** 9 Soviet budget 16 billions, a world's record, with immense outlays for industry; private trade sinks to vanishing point.
- 29 U. S. apologizes to Italy for alleged slur by Maj. Gen. Smedley Butler on Mussolini.
- Feb.** 5 Malcolm Campbell sets new speed record in auto, 245.733 miles per hour at Daytona Beach, Fla.
- 24 Supreme Court holds 18th (Prohibition) Amendment constitutional.
- 26 The New York World sold by Pulitzers to the *Telegram*.
- 27 U. S. Senate passes soldiers' bonus.
- Mar.** 28 Paul von Hindenburg assumes rule of Reich as dictator "to curb radical excesses."
- April** 7 Anton J. Cermak elected Mayor of Chicago, defeating "Big Bill" Thompson.
- 14 Alfonso XIII signs abdication, quits Spain with family. Niceto Alcalá Zamora is provisional president.
- May** 1 Empire State, tallest building in world, opens; 102 stories, 1,250 feet.
- 7 Francis ("Two-Gun") Crowley, youthful killer, captured after spectacular battle with N. Y. police.
- 27 Auguste Piccard and Charles Kipfer up 52,493 feet over Alps in balloon testing stratosphere rays.
- 30 Mussolini closes "Catholic Action" society in Italy, charging political activity.
- June** 6 Navy to drop base at Guam, no longer of military value.
- 20 Hoover proposes world debt moratorium for one year.
- July** 1 Post and Gatty back at Roosevelt Field, completing circuit of globe in 8 days, 15 hours, 51 minutes. Previous record (Graf Zeppelin) 21 days, 7 hr., 34 min.
- Aug.** 9 Revolt falls in Cuba; ex-President Mario G. Menocal, rebel leader, flees.
- 24 Labour cabinet resigns in Britain; King asks MacDonald to form coalition government.
- Sept.** 19 Japan seizes Mukden, Manchuria.
- Oct.** 24 Al Capone gets eleven years and \$50,000 fine for income-tax fraud. George Washington Bridge opens between New York and New Jersey.
- Nov.** 4 Japan is cited before League of Nations for trespassing in Manchuria.
- 5 MacDonald announces 20-member coalition cabinet for Britain.
- 12 \$59,000,000 Naval appropriations slash announced by Hoover.
- 29 Japan rejects League plan for neutral zone in Manchuria; China accepts.
- Dec.** 2 Dr. Robert A. Millikan brings from Germany pictures of atom-smashing with cosmic rays.
- 8 Chancellor Heinrich Bruening of Germany slashes wages and prices by decree; says he may use martial law to curb extremists.
- 22 War debt moratorium is ratified in Senate.
- DIED:** Marshal J. J. Joffre, 78, Jan. 3; Anna Pavlova, 46, Jan. 22; Nellie Melba, 70, Feb. 22; Arnold Bennett, 63, Mar. 27; Knute Rockne, 53, Mar. 31; David Belasco, 76, May 14; Frank Harris, 75, Aug. 26; Sir Thomas Lipton, 81, Oct. 2; Thomas A. Edison, 84, Oct. 18; Vachel Lindsay, 52, Dec. 5.

1932 People were dissatisfied with Prohibition. The Wickersham Committee survey disclosed the monumental traffic in alcohol, the organized and amply financed gangsterism that everyone knew about. Hoover and Congress vacillated. The Depression still plagued industry, merchandising, real estate. The nation's business seemed stalled on dead center. That gloomy, listless December, the nation's ear was tuned to shuffling cards, and public interest focused on a bridge table where Sidney Lenz and the Culbertsons played an epic contract bridge match to determine the merits of their systems of bidding.

- Jan.** 9 Bruening notifies world Germany is unable to pay reparations.
- 12 Hattie W. Caraway, Ark., elected to U. S. Senate, first woman elected to that body.
- 24 Samuel Seabury, after 6 months of investigation, indicts Tammany for New York misrule.
- 29 Japanese invade Shanghai; U. S. warns Tokyo to respect American rights.
- Feb.** 3 Andrew Mellon named Ambassador to England; Ogden Mills Secretary of Treasury.
- 15 Hoover names Benjamin N. Cardozo to U. S. Supreme Court, succeeding Oliver Wendell Holmes (retiring).
- 27 James Chadwick, British scientist, announces discovery of neutron, smallest particle.
- Mar.** 1 Lindbergh baby kidnaped at Hopewell, N. J.
- 7 4 killed as 3,000 riot for jobs at River Rouge Ford plant near Detroit.
- 13 Hindenburg beats Adolf Hitler in German presidential elections, but fails to get majority over all candidates.
- April** 4 Vitamin C isolated after 5-year search by Dr. C. C. King, University of Pittsburgh.
- 7 Roosevelt makes "Forgotten Man" speech on radio, setting keynote of his campaign for President.
- 9 Lindbergh paid \$50,000 ransom over Bronx cemetery wall (Apr. 2), New Jersey police announce.
- 10 Hindenburg beats Hitler in runoff by nearly 6 million votes; bans SS troops 3 days later.
- May** 1 World's biggest electric power plant to be at Dneprostroy, U.S.S.R.

- 6 French President Doumer shot by Russian fanatic, dies next day.
- 12 Lindbergh baby found slain in brush-pile.
- 15 Japanese Premier Tsuyoshi Inukai assassinated by Jap Fascists.
- 20 Amelia Earhart Putnam starts solo flight from Harbor Grace, Newfoundland. Lands at Culmore, N. Ireland 15½ hr. later; first woman to fly Atlantic alone.
- June** 2 Bonus Army of 3,500 reported marching on Washington from North, Central, Middle West States.
- 6 John D. Rockefeller, Jr., calls for Repeal; declares Prohibition has failed.
- 16 Hoover and Charles Curtis renominated; Republicans reject Repeal, advocate state option.
- July** 1 Democrats nominate F. D. Roosevelt on 4th ballot.
- 7 House passes 2-billion-dollar Garner-Wagner relief bill.
- 11 Hoover vetoes relief bill.
- 20 Franz von Papen seizes German government, puts army in charge after Nazi-Communist rioting.
- 28 U. S. Army under Gen. Douglas MacArthur drives Bonus Army out of Washington with tanks, tear gas: 1 killed by police bullet.
- Aug.** 30 Hermann W. Goering elected Reichstag President; Von Papen continued as Chancellor.
- 31 Germany demands arms equal to those of other nations.
- Sept.** 1 Mayor Walker of New York resigns during ouster proceedings before Roosevelt.
- 30 London: mass demonstrations of hunger marchers stopped by police in Whitehall.
- Nov.** 7 Supreme Court orders retrial of Scottsboro Case.
- 8 Roosevelt wins in Democratic landslide: Congress wet, overwhelmingly Democratic.
- 22 Roosevelt confers with Hoover at White House; fail to reach agreement on foreign policy.
- Dec.** 5 Repeal loses by six votes in House.
- 21 House votes 3.2 beer.
- DIED:** Lytton Strachey, 51, Jan. 21; Edgar Wallace, 56, Feb. 10; Minnie Maderd Fiske, 67, Feb. 15; Aristide Briand, 69, Mar. 6; John Philip Sousa, 77, Mar. 6; Ivar Kreuger, 52, Mar. 12; George Eastman, 77, Mar. 14; Flo Ziegfeld, 62, July 22.

33 Roosevelt was in, Hoover out. Roosevelt was fitting Cabinet pieces together, making plans. Hoover was packing his papers. In the long run from November to March, the rolls of blood were mounted and the nation grew jittery. From Germany, increasingly violent and truculent, the name Adolf Hitler came more and more into the news. It was the year of the NRA and the Blue Eagle and the year Prohibition ended. "The only thing we have to fear is fear itself," Roosevelt in his inaugural speech.

4 Iowa farmers threaten to lynch insurance company representative for farm foreclosure.

5 Ex-President Calvin Coolidge, 60, dies of heart attack at Northampton, Mass.

19 Soviet reported to have exiled 45,000 Cossacks to Siberia as grain slackers.

30 Hitler made Chancellor of Germany by Hindenburg.

1 Hitler ends Reichstag; calls for referendum; pledges fight on Marxism; promises jobs for all.

9 League of Nations demands Japan surrender conquests in China.

13 Hoover urges world to stabilize currencies, return to gold.

14 Gov. Comstock of Michigan proclaims bank holiday; \$50,000,000 rushed to Detroit.

15 F.D.R. escapes death as assassin's bullet fells Mayor Cermak, 59, of Chicago at Miami (dies Mar. 6). Police seize Giuseppe Zangara, fanatic.

20 House sends repeal proposal to state conventions.

27 Reichstag building set afire; Nazis blame Communists.

4 Capital of Jehol in north China falls to Japanese.

Roosevelt inaugurated; promises wartime action to defeat Depression.

5 Roosevelt proclaims bank holiday; bans hoarding; embargoes gold.

Nazis capture Reichstag control with record vote.

8 Roosevelt plans new money to open banks at once; gold called in.

10 118 die, 5,000 injured in Southern California earthquake.

12 President Roosevelt broadcasts first "Fireside Chat."

14 Congress votes 3.2 beer.

15 Exchanges reopen; stocks up.

21 Roosevelt offers plan for 250,000 Civilian Conservation Corps jobs. C. E. Mitchell, former National City Bank of N. Y. chairman, arrested for income-tax evasion; acquitted in subsequent trial.

23 Reichstag confers blanket powers on Hitler for 4 years.

27 Federal employees' pay cut 15 percent on basis of drop of 21.7 percent in living cost since 1928.

28 Nazis boycott Jews; order labels on all Jewish stores.

April 3 Michigan first state to vote Repeal.

4 Airship Akron falls in sea off Jersey; Rear Adm. Wm. A. Moffett and 72 lost.

7 Beer barrels roll as 3.2 brew becomes legal.

19 U. S. goes off gold standard.

21 Roosevelt and Prime Minister MacDonald meet for recovery talks.

24 5,000 school teachers storm Chicago banks for 30 millions back pay.

May 1 Hitler orders compulsory toil for every able-bodied German youth.

12 Farm and relief bills signed by President.

15 U. S. refuses to join Britain and France for three-power action against Hitler.

16 Roosevelt calls on world for non-aggression pact.

17 Hitler accepts Roosevelt plan, demands equality for Reich.

18 Hugh A. Johnson named administrator of industry.

23 New York votes 20 to 1 for Repeal. J. P. Morgan & Co. assets dropped \$255,673,843 since 1929, Senate committee told.

27 Century of Progress Exposition at Chicago opens.

June 7 Italy, Britain, France, and Germany sign 4-power pact at Rome for ten-year peace.

12 London Monetary and Economic Conference opens.

16 Roosevelt signs NRA bill, opens recovery drive; 5,000,000 jobs his goal.

June 22 Nazis ban Socialist party in Germany, charge treason.

29 London Monetary and Economic Conference begs Roosevelt for stabilization agreement; warns of collapse, currency war.

30 Roosevelt rejects gold bloc stabilization plan.

- July** 9 Hitler wants Germany 100 percent Nazi, forbids rival parties "forever."
- 11 "Super-Cabinet" formed to direct U. S. recovery.
- 12 Blanket industrial code sets wages at minimum of 40 cents an hour.
- 19 Italo Balbo leads 24-plane armada to N. Y. after transatlantic journey to Chicago Fair.
- 20 Stocks break 5 to 20 points; worst break in 3 years.
- 22 Wiley Post completes solo globe circuit in 7 days, 18 hours, 45 minutes.
- 27 World Monetary and Economic Conference adjourns indefinitely.
- Aug.** 3 Fusion nominates F. H. LaGuardia for Mayor of New York City.
- 5 U. S. strike truce signed by industry and labor; Sen. Robert F. Wagner heads Mediation Board.
- 7 Reich scorns Anglo-French notice to stay out of Austria.
- 26 killed in riots in Havana.
- 12 President Gerardo Machado flees as mob sacks presidential palace in Cuba.
- 13 Roosevelt sends 3 warships to Cuba.
- 14 Guglielmo Marconi proves micro-waves carry farther than range of vision.
- 27 Raymond Moley resigns from Roosevelt "Brain Trust."
- Sept.** 1 Hitler insists Jewry be uprooted in Germany.
- 5 Radicals seize power in Cuba.
- 8 King Faisal I of Iraq dies in Bern, Switzerland; Ghazi I succeeds to throne.
- 10 Jews organize drive to boycott Nazi products, shipping, services. Ramón Grau San Martín chosen President of Cuba by revolutionary junta; sworn in at Havana.
- 13 200,000 New Yorkers participate in 10-hour parade up Fifth Avenue for NRA.
- 14 Seething Cuba under dictator rule by Dr. Ramón Grau San Martín.
- Oct.** 3 Engelbert Dollfuss, of Austria, wounded by Nazi fanatic.
- 14 Hitler bolts League of Nations and arms parley at Geneva.
- 16 U. S. remaining aloof in Europe, Norman H. Davis tells Geneva Conference.
- 17 Dr. Albert Einstein, refugee from Germany, arrives in United States, settles in Princeton, N. J.
- 22 Roosevelt begins dollar control; authorizes RFC to buy newly mined gold.
- 25 Newly mined gold price set at \$31.36 per oz., 27 cents above world market price.
- Nov.** 7 F. H. LaGuardia elected New York Mayor.
- 8 Cuba in state of war again.
- 12 Hitler wins 93.4 percent vote in referendum on Nazi foreign policy.
- 15 Morgenthau replaces Acheson as Undersecretary of Treasury, becomes acting Secretary during leave granted Woodin.
- 16 British ready to conciliate Germany with new arms concessions.
- 17 U. S. and Russia resume full relations (as of 11:50 p.m., Nov. 16). Soviet gives list of guarantees including pledge "to refrain from propaganda against the police or social order of the U. S."
- 26 California mob storms jail; lynches two kidnap slayers at San Jose; Gov. Rolfe defends action of lynch mob.
- 28 Lynching wave spreads as Missouri mob hangs, burns Negro St. Joseph, and Maryland mob fights posse in attempt to free four lynch suspects.
- Dec.** 3 Seventh International Conference of American States opens in Montevideo, Uruguay; all nations but Costa Rica are represented.
- 5 Prohibition ends in U. S. as Utah 36th state, ratifies Repeal at 5:30 p. m.
- 21 Roosevelt orders silver purchase and coined in new inflation money.
- 23 Crown Prince born to Emperor Hirohito and Empress Nagako of Japan.
- Over 200 dead in French railroad wreck 17 miles east of Paris.
- 24 Assassins stab to death Armenian Archbishop marching to altar of New York church.
- 30 Premier Ion Duca of Rumania assassinated in Bucharest.
- DIED:** Sara Teasdale, 48, Jan. 29; John Galsworthy, 66, Jan. 31; James Corbett, 66, Feb. 18; Earl De Biggers, 48, Apr. 5; Fatty Arbuckle, 46, June 29; Ring Lardner, 4, Sept. 25; E. H. Sothern, 73, Oct. 28; Texas Guinan, 49, Nov. Knud Rasmussen, 54, Dec. 21.

1934 The New Deal delved into the alphabet and came up with multi-lettered agencies. Mr. Roosevelt's resonant voice roused and reassured the nation in fireside chats. The *true Eagle* flapped. People talked about Section 7-A, codes, NRA, CCC, farm relief, cracking down on chiselers, and boondoggling. The little guy (it seemed) was coming to his own at last. Prohibition was finessed. The nation enjoyed its first legal alcoholic holiday in fifteen years. New York had double cause to celebrate: Tammany was out in the cold for the first time since 1818.

- Jan. 4 Roosevelt notifies Congress recovery program will cost \$10,000,000,000 by June 30, 1935.
- 10 Van der Lubbe, Dutch communist, beheaded for Reichstag fire.
- 11 6 Navy planes reach Hawaii from California in 24¾ hours.
- 31 Dollar cut to 59.06 cents (gold value).
- Feb. 6 20 dead in Paris riots; Daladier's government resigns next day.
- 12 France paralyzed by general strike. Civil war in Austria, over 500 dead.
- 17 Britain, France, Italy send note to Hitler backing Dollfuss government in Austria.
- 19 Nazis send ultimatum to Dollfuss.
- Mar. 1 Henry Pu-yi becomes Emperor Kang Teh of Manchukuo. (Manchukuo was Japan's new name for Manchuria.)
- 10 Roosevelt orders curtailment of Army air mail after ten Army casualties in 20 days.
- 15 Samuel Insull, reportedly disguised as woman, flees Athens to evade extradition to U. S.
- 24 Roosevelt signs Philippine Independence Bill.
- 28 Roosevelt gets first setback in Congress as his veto of independent offices appropriation bill is overridden.
- Apr. 13 4,700,000 U. S. families on relief, Hopkins reports.
- 30 U. S. rejects Japanese claim of hegemony in China.
- May 10 Severe drought in Midwest is followed by dust storms.
- 28 Quintuplets born to Mrs. Olivia Dionne, at Corbeil, Ont.
- June 14 Germany declares six-months moratorium on all foreign debts.
- 29 Gov. William Langer, North Dakota, sentenced to eighteen months in prison for conspiracy to defraud U. S. government.

- 30 Hitler "purge" kills Ernst Roehm and score of other Nazi leaders.
- July 15 Famine threatens San Francisco in general strike; all unions go out in sympathy with longshoremen and marine workers.
- 19 San Francisco strike settled.
- 24 Heat, drought blanket Midwest "dustbowl"; at least 700 dead.
- 25 Engelbert Dollfuss, 42, Austrian Chancellor, assassinated.
- Aug. 2 Hindenburg, 86, dies; Hitler becomes absolute dictator of Germany.
- 9 U. S. nationalizes silver, to pay 50.01 cents an ounce.
- 26 Hitler asks return of Saar, peace with France.
- 31 Huey Long enters New Orleans with troops; plans to investigate political enemies.
- Sept. 5 337,000 out in nationwide textile strikes.
- 8 About 130 die, many missing as liner *Morro Castle* burns off N. J.
- 20 Bruno Richard Hauptmann arrested for Lindbergh kidnap-slaying.
- 25 Gen. Hugh Johnson resigns as NRA administrator.
- Oct. 6 Catalonia secedes in Spain; Reds riot, civil war threatens.
- 9 Alexander I of Yugoslavia, 45, and French Foreign Minister Barthou assassinated at Marseilles by Croatian.
- Nov. 4 Charles Kingsford-Smith flies first eastward Pacific flight from Honolulu to California in 14 hours, 59 minutes.
- 6 Democrats gain Congress strength in New Deal election victories.
- 21 Japan asks naval parity; warns of intention to terminate 1922 Washington agreement.
- Dec. 3 France and Germany sign Saar Treaty at Rome.
- 5 Russia "purges" [executes] 66 for plotting against Stalin regime.
- 19 Japanese Privy Council votes to abrogate Washington Naval Treaty of 1922.
- 26 Ethiopia protests to League of Nations against Italian oil seizures.
- 29 Japan formally denounces 1922 naval treaty.
- DIED:** Albert I of Belgium, 58, Feb. 17; Sir Edward Elgar, 76, Feb. 23; John J. McGraw, 60, Feb. 25; Frederick Delius, 71, June 10; Mme. Marie Curie, 66, July 4; Marie Dressler, 64, July 28.

1935 In Europe the dictators grew more arrogant. Mussolini cried aloud his dreams of Roman grandeur from the Quirinal balcony. In far-off Ethiopia dark warriors primed muskets and sharpened spears. Hitler eyed Austria and the Ruhr.

But why worry? America was climbing out of the Depression, we hoped; business was stirring and money was channeled through relief rolls to the distressed and the hungry. Except for outraged cries from the Liberty League, the New Deal forged ahead.

- Jan.** 2 Bruno Richard Hauptmann goes on trial at Flemington, N. J., for kidnap-slaying of the Lindbergh baby.
4 Roosevelt asks 3,500,000 jobs (PWA) to end dole.
7 Oil control provision of NIRA unconstitutional, Supreme Court decides in first New Deal test.
13 Saar plebiscite 90 percent for reunion with Germany.
24 Liner *Mohawk* sinks after collision off N. J. coast.
29 Senate rejects World Court.
- Feb.** 10 Rome reports 12-day clash between Italian and Ethiopian troops.
13 Hauptmann guilty.
- Mar.** 1 Saar is returned to Germany.
6 22,000,000 on U. S. relief rolls.
16 Hitler scraps Versailles Treaty by re-establishing universal military training in Germany.
27 Hitler demands union with Austria, part of Czechoslovakia; wants air force and navy.
- April** 1 Scottsboro boys win new trial.
14 Britain, France, Italy criticize Reich for treaty violation.
- May** 12 Marshal Pilsudski, 67, Polish dictator, dies.
18 Largest land plane crashes after collision over Moscow; 49 killed.
24 9-year-old George Weyerhauser of wealthy lumber family kidnaped at Tacoma, Wash.
27 Supreme Court unanimously voids NRA.
- June** 1 Weyerhauser returned after payment of \$200,000 ransom.
3 SS *Normandie* on maiden voyage, crosses Atlantic in 4 days, 11 hr., 42 min.; new record.
7 Pierre Laval again becomes Premier of France.
J. Ramsay MacDonald, Labour Prime Minister, resigns; Stanley Baldwin heads new Conservative government in Britain.

- 10 China yields to Japan in north, surrenders rule over Peiping, Tientsin.
14 Roosevelt signs stop-gap NRA.
19 Anglo-German naval pact gives U-boat parity.
Senate passes Wagner Labor Relations Act, Social Security Act.
- July** 5 Roosevelt signs Wagner Act.
17 More than 80,000 Jews have quit Germany.
- Aug.** 15 Will Rogers, 55, and Wiley Post, 36, killed in plane crash in Alaska.
21 Senate votes for neutrality, ban on arms sale to belligerents in Ethiopia crisis.
29 Queen Astrid, 30, of Belgium is killed in auto crash.
Haile Selassie cedes oil rights in half of Ethiopia to American and British interests in an effort to stop Italy.
- Sept.** 2 Hurricane strikes Florida Keys reaches mainland next day; several hundred dead.
3 U. S. State Department forces oil promoters to cancel Ethiopia concession.
8 Huey Long, 42, shot at Louisiana capitol; his assailant killed by guards. Long dies September 10.
15 Jews deprived of citizenship by Nazis; ghettos revived; swastika becomes national flag.
17 Manuel Quezon elected first president of Philippines.
21 Mussolini rejects League's peace plan for Ethiopia.
- Oct.** 2 Ethiopia invaded.
3 Italians bomb Adowa; 1,700 reported dead.
23 Dutch Schultz shot by gangster in Newark, N. J., cafe; dies next day.
- Nov.** 3 King George II recalled to Greek throne in plebiscite.
11 Army pilots climb 74,000 ft. (1 mi.) in stratosphere flight.
22 First air mail flight across Pacific to Manila.
27 Japanese strike at Peiping.
- Dec.** 9 Supreme Court denies Hauptmann appeal; he must die Jan. 13.
14 Thomas G. Masaryk resigns as President of Czechoslovakia.
22 Anthony Eden becomes England Foreign Secretary; urges sanctions against Italy.
- DIED:** Edwin Arlington Robinson, 6 Apr. 6; Adolph S. Ochs, 77, Apr. 1; Oliver Wendell Holmes, 93, Mar. 1; T. E. Lawrence (of Arabia), 4 May 19; Jane Addams, 74, May 2; Alfred Dreyfus, 75, July 12; Bill Sunday, 71, Nov. 6.

936 The fuse was lit in Ethiopia and North China. As war rumbled along those far-off horizons, the U. S. sidled behind a "Neutrality Act" and fought shy of foreign entanglements. This time, we said, we will have no truck with foreign wars. As for domestic conflict, John L. Lewis had just punched Will Hutcheson in the nose and the boys were choosing up sides for Labor's great civil war between the AFL and CIO. It was, in fact, an exciting time for Labor, what with the generous new Wagner Act and the introduction of the sit-down strike. The New Deal was in the saddle, F.D.R. had signed the Social Security Act and another national election was coming up.

Jan. 3 President Roosevelt backs drastic neutrality law, hits "autocrats" of world.

6 AAA crop control program declared unconstitutional by the Supreme Court.

15 Japanese withdraw from naval conference at London.

20 King George V, of England, dies at 70; Prince of Wales, 41, succeeds to the throne as Edward VIII.

Feb. 17 TVA wins first test of constitutionality as Supreme Court rules Wilson Dam can sell power.

26 Army seizes power in Japan; Tokyo under martial law.

Mar. 1 10,000 Ethiopians slain, two armies routed.

7 Hitler sends German troops into the Rhineland, defying treaty at Versailles; scraps Locarno Pact.

8 Italians halt war in Ethiopia pending peace talks recommended by League.

10 France and Belgium insist on military sanctions against Germany.

29 Hitler receives 98.79 percent vote in German elections.

31 Japanese troops invade Mongolia; Russians angry.

April 3 Bruno Richard Hauptmann electrocuted in Trenton, New Jersey.

7 Great Britain gives League evidence Italy is using poison gas in Ethiopia.

May 5 Italian army occupies Addis Ababa; war is over.

9 Dirigible *Hindenburg* docks in Lakehurst, N. J., 61½ hr. after take-off from Friedrichshafen, Ger.

18 Guffey Coal Act found constitutional by Supreme Court.

June 4 500,000 strikers are out as Léon Blum's Socialist government, France's first, takes office.

11 Alf M. Landon, of Kansas, nominated for President by Republican Convention at Cleveland.

27 Franklin D. Roosevelt is renominated for President.

July 1 Britain, France refuse to recognize Italian conquest of Ethiopia but will not go to war.

19 Gen. Franco and rebel force land in Spain from North Africa.

Aug. 5 Premier General John Metaxas declares dictatorship in Greece under King George II.

12 Germany agrees to non-intervention in Spain.

Sept. 25 France announces franc will be devalued in accord with the United States and Great Britain.

Oct. 3 France slashes its tariffs from 15 to 20 percent in bid for world trade.

14 Belgium renounces French alliance, will look to own resources for national safety.

24 Germany, Italy agree to Fascist front against Europe.

Nov. 3 President Roosevelt, Governor Herbert H. Lehman, of New York, win election in sweeping Democratic victories.

18 Italy and Germany recognize Franco's regime in Spain.

25 Japan signs anti-Comintern treaty with Germany.

Dec. 11 Edward VIII abdicates.

12 George VI proclaimed King; Edward, as Duke of Windsor, leaves England.

15 Twenty-one American republics sign neutrality pact.

25 Generalissimo Chiang Kai-shek, dictator of China, is released thirteen days after being kidnaped by forces of Marshal Chang, former war lord, in mutiny.

DIED: John Gilbert, 38, Jan. 9; Rudyard Kipling, 70, Jan. 18; Charles Curtis, 76, Feb. 8; Antonio Scotti, 70, Feb. 26; Ivan P. Pavlov, 86, Feb. 27; Marilyn Miller, 37, Apr. 7; Ottorino Respighi, 56, Apr. 18; Oswald Spengler, 51, May 8; G. K. Chesterton, 62, June 14; Maxim Gorki, 68, June 18; Lincoln Steffens, 70, Aug. 9; Ernestine Schumann-Heink, 75, Nov. 17; Luigi Pirandello, 69, Dec. 10; Arthur Brisbane, 72, Dec. 25.

1937 Now Spain was a battleground of weapons and clashing ideas. The Dictators had become a blustering team and there was no one to call their bluff. In Moscow the Kremlin produced a fantastic purge of traitors and weaklings and confused Bolsheviks.

In the U. S. Franklin Roosevelt was about to begin his second term after brushing off the Landon challenge. The Republican party's representation in Congress had dwindled to a handful. A confident F.D.R. was about to launch his scheme against the "Nine Old Men" on the U. S. Supreme Court.

Jan. 2 Britain signs Mediterranean Accord with Italy in effort to split Duce from Hitler.

4 10,000 Italian troops land in Spain.

19 Howard Hughes crosses U. S. in 7 hr., 28 min., 25 sec.

20 Roosevelt takes oath for 2nd term; pledges end to poverty.

23 17 Moscow defendants confess they helped Trotsky plan to undermine Soviet.

30 Hitler scraps Versailles war guilt clause.

Feb. 2 Sit-down strikers at Flint, Mich., defy Court order to evacuate.

5 Roosevelt asks power to enlarge Supreme Court to 15 Justices; new appointments would offset elderly members who refuse to retire.

23 1,400 Ethiopians executed for attack on Gen. Rodolfo Graziani.

Mar. 1 Steel plants raise wages to \$5 per day; grant 40-hour week.

18 413 pupils, 14 teachers die in New London, Tex., school explosion.

22 Hughes, Brandeis, Van Devanter oppose extra Justices as impairing Court's efficiency.

29 Supreme Court backs Washington State Minimum Pay Act for Women.

April 12 Supreme Court upholds Wagner Act.

30 Franco battleship sunk by Loyalist plane, about 700 drown.

May 3-5 Italy and Germany agree to help Franco fight on, and attack Madrid anew.

6 *Hindenburg* explodes at Lakehurst; 36 die as world's largest dirigible falls in flames.

12 George VI crowned in London.

18 Senate committee rejects Roosevelt Court plan, 10-8; Van Devanter, 78, resigns.

24 Social Security upheld by Supreme Court.

25 AFL declares war on CIO.

26 Steelworkers strike; 75,000 out.

28 Neville Chamberlain becomes Prime Minister of Britain, succeeding Baldwin.

June 3 Duke of Windsor, former Edward VIII, weds Wallis Warfield Simpson.

22 Joe Louis wins heavyweight title, knocking out James J. Braddock.

July 2 Amelia Earhart Putnam, 38, missing in Pacific in round-the-world flight; Navy ships and planes in search.

22 Senate defeats Court plan, burying it in committee by 70 to 20; overrides Farm Loan Act veto.

24 Alabama frees 5 of 9 Scottsboro defendants.

29 Tientsin set afire by Jap planes.

Aug. 1 Japs thrust south toward Nanking, after quelling North, to widen "incident war"; Central China in panic.

12 Senator Hugo Black named to Supreme Court.

15 863 die as Chinese planes accidentally bomb Shanghai.

17 Black confirmed; Senate rejects rumors of Senator's Klan affiliations.

23 Japs land at Shanghai; 173 killed as shell explodes in international quarter.

Nov. 29 Britain and France agree to give Hitler colonies in exchange for peace.

Dec. 10 Japanese attack, sack Nanking.

11 Italy quits League over Ethiopia.

12 U. S. gunboat *Panay* sunk by Jap planes.

14 Tokyo apologizes for *Panay*, ousts air chief two days later.

19 Russia executes 8 more officials for treason.

20 Erich von Ludendorff, last German war lord, dies.

21 Roosevelt bars "isolation"; doesn't want "peace at any price."

25 U. S. accepts Tokyo apology on *Panay*.

DIED: Elihu Root, 91, Feb. 7; John D. Rockefeller, 97, May 23; Jean Harlow, 26, June 7; George Gershwin, 38, July 11; Guglielmo Marconi, 63, July 20; Andrew W. Mellon, 82, Aug. 26; Thomas G. Masaryk, 87, Sept. 14; James Ramsay MacDonald, 71, Nov. 9; Maurice Ravel, 62, Dec. 28.

1938 The stock market sagged and slumped, industry was again in the doldrums. Roosevelt blamed a business recession. "Pump priming" was the word in Washington, where they talked of fresh billions to get things moving again.

The President was working on a plan for an enlarged Navy. The program sounded logical, for in Europe the machinery of war gathered momentum ominously, while the democratic nations fumed and hesitated. Hitler's troops were poised for Austria; the stage was set for Munich.

Jan. 19 Franco air raids kill 700 in Barcelona and Valencia.

28 Roosevelt asks billion dollars for "two-ocean Navy."

Feb. 4 Hitler announces seizure of army control; Ribbentrop becomes Foreign Minister.

16 Austria, yielding to Hitler's threat, puts Nazis in cabinet.

20 Hitler defies foes, says Nazis will protect Germans everywhere.

Anthony Eden resigns as British Foreign Minister, charging Chamberlain seeks to "buy peace."

22 Commons approves Chamberlain policy.

Mar. 4 Rev. Martin Niemöller imprisoned by Nazis.

12 Hitler strikes in Austria; Nazis seize government as army moves in; Schuschnigg ousted.

18 Mexico expropriates foreign oil interests.

29 U. S. protests Mexican oil seizures.

April 4 Loyalist Spain severed as Rebels cut sea road.

10 Austrians vote 99.75 percent for *Anschluss*.

16 Britain and Italy sign pact to maintain peace.

May 3 Hitler in Rome, pledges amity with Duce.

9 League yields, allowing France and Britain to recognize Italy's conquest in Ethiopia, which is proclaimed 3 days later.

June 15 Wage-Hour Bill enacted.

20 France closes frontier at behest of Britain, halting aid to Spanish Loyalists.

23 Germany puts entire nation under temporary forced-labor system.

July 4 50,000 jailed in Austria during 3½ months of Nazi terror.

9 14 Jews, 44 Arabs dead in 5-day Palestine riots.

14 Howard Hughes completes flight around world: 3 days, 19 hr., 14 min., 10 sec. (record).

18 Douglas Corrigan lands in Dublin in "wrong-way" flight.

31 Japanese and Russians in border skirmish.

Aug. 3 Mexico rejects U. S. protest, cites U. S. New Deal to justify oil seizures.

11 Russian-Japanese truce effected.

Sept. 1 Hitler demands autonomy for Sudeten Germans.

5 Prague yields to Nazi pressure on nearly all German demands.

10 Hitler, Goering defiantly promise protection to Sudeten Germans.

19 Britain and France, after parley, urge Czechs to surrender Sudetenland.

25 Roosevelt appeals to Hitler and Czechs for peaceful settlement of problems.

30 Britain, France, Italy, Germany in parley at Munich agree to dismemberment of Czechoslovakia. Chamberlain returns to London with "peace in our time."

Oct. 1 Nazi troops cross Czech border; Czechs yield to Polish demand for Teschen.

3 Hitler makes triumphant entry in Sudetenland, and—

5 forces Britain and France to yield more Czech territory in Bohemia.

30 "Attack from Mars" in radio sketch by Orson Welles causes widespread panic.

Nov. 2 Hungary gets slice of Czechoslovakia, too.

10 Assassination of German envoy in Paris by Herschel Grynszpan looses Nazi wrath at Jews over all Reich; Jews herded into camps; fined \$400,000,000 three days later.

Mexico agrees to pay for oil and land seizures.

13 Mother Cabrini first American to be beatified in Vatican.

18 Hitler recalls German Ambassador from U. S. in protest against American anti-Nazi attitude.

23 Jews in Germany fined 20 percent of all property.

Dec. 6 French, German peace pact signed.

DIED: Clarence Darrow, 80, Mar. 13; Fyodor Chaliapin, 65, Apr. 12; Benjamin Cardozo, 68, July 9; Samuel Insull, 78, July 16; Queen Marie of Rumania, 62, July 18; Warner Oland, 57, Aug. 6; Patrick Cardinal Hayes, 70, Sept. 4; Thomas Wolfe, 37, Sept. 15; Alma Gluck, 54, Oct. 27; Kemal Ataturk, 57, Nov. 10.

1939 After Munich (Sept. 30, 1938) a murky twilight settled over the world—a time of uneasiness and fear. Britain armed feverishly, the U. S. stepped up plane production. The cause of the Spanish Loyalists disintegrated. Bundists, American Firsters and Communists grew hoarse denouncing warmongers. Congress stood firm for neutrality.

New York was excited about a World's Fair—the World of Tomorrow. While the assorted glamour and gadgets of this bright glimpse of the future were assembling on Flushing Meadow, a very different world was being shaped by forces unleashed in Europe. It was not the World of Tomorrow we expected. In its vast changes, economic and political upheavals, its waste and tumult and pain, it was to surpass the most extravagant forecasts.

Jan. 4 President Roosevelt calls for extensive defense program.

5 Felix Frankfurter named to Supreme Court.

7 Tom Mooney pardoned.

20 Hitler removes Hjalmar H. G. Schacht; appoints Walther Funk to head Reichsbank.

24 30,000 dead in Chilean earthquake; cities wrecked, destruction in 6 provinces.

26 Barcelona yields; Loyalists flee to North.

30 Hitler pledges aid to Italy in war, calls for colonies, foreign trade, and denounces "defamation in U. S."

Feb. 10 Pope Pius XI dies at 81 after seventeen years' reign.

13 Justice Louis D. Brandeis retires at 82.

18 Golden Gate International Exposition opens in San Francisco.

27 Franco officially recognized by France and England.

Sit-down strikes outlawed by Supreme Court.

Mar. 2 Cardinal Pacelli elected Pope, becomes Pius XII.

7 UAW secedes from CIO.

12 Pius XII crowned Pope.

14 Slovakia, Ruthenia declare independence; Germany enters Bohemia-Moravia; Hungary enters Ruthenia.

15 Hitler and troops enter Prague.

16 Bohemia-Moravia becomes German protectorate; Hitler assumes protection of Slovakia; Hungary annexes Ruthenia.

20 William O. Douglas named to Supreme Court.

22 Lithuania cedes Memel to Germany.

28 Madrid surrenders to Franco.

29 Spanish civil war ends as last 9 of 52 provincial capitals surrender.

31 Britain, France pledge aid if Poland resists a Nazi attack.

April 1 U. S. accords Franco full recognition.

7 Thomas J. Pendergast indicted by U. S. on income tax evasion.

Italian troops invade Albania.

14 President Roosevelt vows to defend the United States' neighbors with arms and finances.

27 House of Commons approves conscription in Great Britain.

28 Hitler scraps war renunciation treaty with Poland and naval limitations pact with England. Demands Danzig, and rebuffs Roosevelt's peace plea.

30 Over half million attend New York World's Fair on opening day.

May 3 Litvinov retires as commissar of foreign affairs, Molotov succeeds him.

5 Poland refuses to yield Danzig to Hitler; offers to negotiate.

7 Military and political alliance between Germany and Italy announced.

17 Quebec welcomes King and Queen of England.

22 Germany and Italy sign ten-year military pact.

23 *Squalus*, United States submarine, sinks in 240 feet of water off Hampton Beach, N. H.

June 1 Townsend old-age pension plan defeated in House.

5 Supreme Court voids Frank Hague's ban on CIO mass meetings.

8 President Roosevelt and King George pledge friendship at state dinner in Washington.

13 Heinrich Himmler sent to crush Czech unrest.

21 Lou Gehrig has rare form of infantile paralysis; can never play baseball again.

July 16 Fritz Kuhn, U. S. No. 1 Nazi, arrested, called drunk, profane.

26 U. S. abrogates 1911 trade treaty with Japan.

Aug. 19 German-Russian 7-yr. trade agreement signed.

21 German-Russian 10-yr. nonaggression pact announced (signed Aug. 24).

- 23 F.D.R. asks Victor Emmanuel to make peace proposal.
- 24 F.D.R. asks Germany and Poland to avoid war.
Pope Pius appeals for peace.
- 25 Britain votes war powers to government.
Poland accepts U. S. peace plea; F.D.R. sends 2nd appeal to Hitler. Polish-British 5-yr. military alliance signed.
- 26 Daladier asks Hitler for peaceful settlement with Poland.
- 27 Hitler rejects Daladier appeal, demands Danzig and Corridor.
- 29 Hitler agrees to negotiations with Poland, asks for Polish delegate by Aug. 30.
- 31 Germany considers negotiation plan rejected when no Polish delegate appears.
Hitler publishes 16-point peace plan; Poland rejects it.
- Sept.** 1 Germany invades Poland, annexes Danzig.
Britain, France give Hitler ultimatum to stop hostilities.
- 3 Britain, France declare war on Germany
British liner *Athenia* torpedoed off Scotland, sinks next day.
- 5 U. S. proclaims neutrality.
- 8 F.D.R. proclaims limited national emergency.
- 10 Canada declares war on Germany.
- 17 Russia invades Poland.
- 18 Nazi, Russian armies meet at Brest-Litovsk, Pol.
- 19 Hitler offers peace if Britain, France accept his territorial gains.
- 20 Britain, France reject Hitler offer.
- 21 F.D.R. asks Congress to repeal arms embargo.
- 23 Germany says conquest of Poland is complete.
- 27 Warsaw surrenders.
- 28 Nazi-Soviet pact signed; partitions Poland.
- Oct.** 2 300-mi. safety felt around America voted at Panamá hemisphere conference.
- 6 Hitler offers peace on his terms or war of destruction.
- 9 Germans capture U. S. ship *City of Flint*, take it to Russia.
- 10 Daladier rejects Hitler peace offer.
- 12 Churchill also rejects Hitler offer.
- 14 British battleship *Royal Oak* sunk; 800 lost.
- 17 Treaty negotiations broken between Turkey, Russia.
- 18 U. S. closes waters to belligerent submarines.
- 19 Turkey signs 15-yr. mutual assistance pact with Britain, France; Turkey not obliged to fight Russia.
- 26 Russia releases *City of Flint*.
- Nov.** 2 Embargo repeal passed by House.
- 4 Roosevelt forbids U. S. ships to enter western European, Baltic or North Sea waters.
- 5 CIO in Canada separates from parent organization in U. S.
- 8 *Life With Father* opens at Empire Theatre, N. Y. C.
Hitler escapes time bomb in Munich beer hall; six killed.
- 20 Chiang Kai-shek elected President of Executive Yuan; H. H. Kung becomes Vice President.
- 23 Nazis use planes to mine British waters.
- 30 Russia attacks Finland from land, sea and air; bombs Helsinki.
- Dec.** 1 Roosevelt denounces invasion of Finland as "wanton flouting of law."
- 5 Fritz Kuhn, Bund leader in U. S., gets 2½ to 5 years for forgery, grand larceny.
- 10 U. S. lends Finland \$10,000,000 as Finns call on world to help beat off Red invader.
- 11 League of Nations calls on Russia to halt Finnish war in 24 hours.
- 12 Russia rejects League's demand, declaring she is not at war with Finland.
- 17 *Graf Spee* scuttled off Montevideo by Hitler order after fleeing British warships.
- 19 Nazi liner *Columbus* scuttled in Atlantic to escape capture.
- 23 Roosevelt names Myron C. Taylor as peace envoy to Pope Pius XII.
- 28 Pope Pius XII returns King Victor Emmanuel's visit to the Vatican; first papal visit to Quirinal in more than seventy years.
- 29 Harry Bridges, west coast labor leader, ruled not a Communist.
- DIED:** Richard Halliburton, 39, Mar. 23?; S. S. Van Dine, 51, Apr. 11; Ralph Pulitzer, 60, June 14; Havelock Ellis, 80, July 8; Sigmund Freud, 83, Sept. 23; Floyd Gibbons, 52, Sept. 24; George Cardinal Mundelein, 67, Oct. 2; Zane Grey, 64, Oct. 23; Douglas Fairbanks, 56, Dec. 12; Heywood Brown, 51, Dec. 18.

1940 After the blitz in Poland—stalemate, boredom. It seemed a phony war. The French army moped behind the Maginot Line; German work gangs poured concrete along the Westwall. In London the war correspondents in their new uniforms talked it over like critics at a play, found it dull.

In the U. S. they were playing the "Star-Spangled Banner" in the theaters (*Life With Father* had just opened) and people grew misty-eyed when Kate Smith sang "God Bless America!" Wendell L. Willkie was about to write a short piece on national affairs called *We the People*. A new force was rising to challenge U. S. complacency, disturb the apathy of the American people.

Jan. 3 F.D.R. asks wartime powers, urges higher taxes for defense.

11 Navy's 5-year program calls for 150 ships costing \$2,500,000,000.

14 FBI seizes eighteen persons in fantastic plot to seize the government.

22 Earl Browder gets 4 years for passport fraud.

Feb. 15 J. P. Morgan & Co. abandons private banking; becomes public corporation April 1.

Mar. 2 Russians, fighting Finland, crack Mannerheim Line, take Viipuri.

7 *Queen Elizabeth*, world's largest ship, comes to New York for safety from Nazi raids.

13 Soviet-Finnish peace terms end war at noon and give Karelian Isthmus, Viipuri to Russia.

17 Murder, Inc., ring of commercialized killers, uncovered in Brooklyn.

20 Édouard Daladier resigns, Paul Reynaud forms new French cabinet next day to prosecute war to the limit.

28 Sumner Welles returns from European "Peace Mission"—his report to White House is secret.

April 7 Eclipse of the sun.

9 Nazis invade Denmark and Norway; Copenhagen occupied.

15 British land in Norway to combat invader; capture Narvik.

May 2 Allies withdraw from central Norway.

10 Nazis invade Netherlands, Belgium, Luxembourg.

Chamberlain resigns, Churchill takes over as Prime Minister.

11 New York World's Fair reopens at Flushing Meadow.

13 Churchill in historic address tells Britain the war means blood, sweat, tears.

14 German bombers raze Rotterdam as Dutch surrender.

16 Roosevelt asks billion for defense, 50,000 airplanes.

Germans rush into France.

22 F.D.R. confers with Landon on "coalition"; Landon refuses unless F.D.R. gives up third term.

28 Belgium surrenders as cabinet disowns Leopold.

Dunkerque evacuation of British begins.

31 Three-fourths of British army rescued from Dunkerque beaches; tanks, matériel lost.

June 9 Norway surrenders.

10 Italy declares war, invades France.

15 Germans enter Paris (city undefended).

Russia seizes Lithuania; Latvia, Estonia seized 2 days later.

17 F.D.R. asks two-ocean Navy.

18 *PM*, new style newspaper, without advertisements, launched in New York by Marshall Field.

20 Stimson and Knox, Republicans, named to War and Navy posts.

22 France and Germany sign surrender at Compiègne.

28 Wendell Willkie, Charles L. McNary nominated by Republicans at Philadelphia.

Russia seizes Bessarabia from Rumania.

July 1 M. L. Annenberg, Philadelphia publisher, gets 3 years for \$1,200,000 tax evasion.

U. S. orders 45 new warships.

4 Time bomb planted at British Pavilion at New York World's Fair, kills two policemen.

12 Britain and Russia sign 20-year mutual-aid pact.

18 F.D.R. nominated for third term at Chicago; Henry Wallace nominated for Vice President next day.

Aug. 1 Gerhard A. Westrick, Nazi super-agent, discovered carrying on activities in Westchester, N. Y.

6 Mayor Houde of Montreal interned for urging resistance to registration act.

- Italians begin drive into Egypt, threatening Suez, Alexandria, British life line.
- 8 Luftwaffe launches all-out attack on England.
- 16 Nelson Rockefeller appointed co-ordinator of Latin-American affairs.
- 17 Willkie, accepting Republican nomination at Elwood, Ind., challenges Roosevelt to debate; upholds draft.
- 18 U. S. and Canada announce joint defense plan.
- 20 Britain offers to lend sea-air bases to U. S.; asks naval aid.
- 21 Leon Trotsky, 61, dies in Mexico City of wounds inflicted by political agent "Frank Jackson."
- English children arrive in the United States, seeking safety from the Nazi air attacks on England.
- 24 Harry Hopkins, ill, resigns as Secretary of Commerce; Jesse Jones succeeds him.
- 31 Rumania demobilizes, prepares for Nazi occupation.
- Senator Ernest Lundeen and 24 others die in airplane crash near Lovettsville, Va.
- Sept. 6 Carol II of Rumania abdicates.
- 7 House passes Selective Service Bill, 263-149.
- Vichy government arrests Gen. Maurice Gamelin, Paul Reynaud, Edouard Daladier.
- 12 Kenvil, N. J., powder plant explosion kills 49, injures 200.
- 13 Willkie opens campaign; his voice gives out after 2-day blast against F.D.R. and New Deal.
- 14 Italians invade Egypt.
- 16 Roosevelt signs draft law.
- 23-25 Dakar beats off British-French sea attack; thwarts De Gaulle's invasion attempt.
- 27 Germany, Italy, Japan sign 10-year military pact.
- Oct. 3 H. G. Wells says U. S. should keep out of the war; our party politics would mess up the peace.
- 4 Hitler, Mussolini meet at Brenner Pass, lay plans for long war.
- 6 Pope Pius calls on women of the world to reject immodest fashions.
- 7 Reichswehr occupies Rumania.
- 16 U. S. registers 17,000,000 for selective service.
- 23 Hitler and Franco meet at Hendaye.
- 24 Hitler and Pétain meet, pledge collaboration.
- 27 New York World's Fair closes; 45 million paid admissions in 2 years.
- 28 Italy invades Greece.
- Nov. 5 Roosevelt re-elected, wins 38 states to Willkie's 10; Democrats keep Congress.
- 7 Third largest suspension bridge collapses in high wind at Tacoma, Wash.
- 8 Hitler says U. S. aid cannot save Britain.
- 9 Neville Chamberlain, British Prime Minister at start of war, dies at 71.
- 11 British air attack smashes Italian fleet at Taranto.
- 12-13 Viacheslav Molotov at Berlin (first time he ever left Russia); holds two-day talk on Soviet's place in "New Order."
- 14 Nazis bomb Coventry, leave historic city in ruins.
- 15 Strike at Downey, Calif., Vultee plant ties up \$50,000,000 plane production (12 days).
- 17 Italians driven off Greek soil.
- 18 John L. Lewis quits as CIO head, following pledge to resign if Roosevelt was re-elected.
- 20 Hungary joins Axis.
- Dec. 1 Gen. Manuel Avila Camacho sworn in as President of Mexico.
- 5 British House of Commons rejects proposal for negotiated peace.
- 9 Gen. Sir Archibald Wavell launches counterattack in Egypt.
- 11 British recapture Sidi Barrani in Egypt from Italians.
- 14 The Sixth Avenue branch of New York's Independent Subway system opens.
- 23 Viscount Halifax becomes British Ambassador to U. S.; Anthony Eden named Foreign Secretary.
- 29 F.D.R. announces aid to Britain; calls for full war aid to Britain; U. S. "Arsenal of Democracy."
- DIED: William E. Borah, 74, Jan. 19; Luisa Tetrazzini, 68, Apr. 28; Emma Goldman, 70, May 14; Ben Turpin, 71, July 1; William B. Bankhead, 66, Sept. 15; Tom Mix, 60, Oct. 12; F. Scott Fitzgerald, 44, Dec. 21.

1941 This was the winter of the long blitz. The Luftwaffe rained bombs methodically on England. The Nazi war machine had rolled through the Balkans and was pushing across the rim of North Africa toward Suez, threatening the British life line. Lend-lease was about to begin, over the bitter protests of isolationists. Already plants were expanding. The cry was for machine tools, aluminum, mechanics. While selective service took the youngsters, the able-bodied, the unmarried, industry's demands started a feverish migration from farms and towns to San Diego, Hartford, Paterson, Seattle, Kansas City, Detroit, Bridgeport. The "Arsenal of Democracy" was beginning its gigantic task. The training of the first raw conscripts had started. In newly staked-out Army camps thousands of wooden barracks and mess halls rose to the clatter of hammer and saw.

Jan. 1 Ban by ASCAP bars most U. S. music from air.

5 British take over 25,000 Italian prisoners in North Africa.

7 William S. Knudsen and Sidney Hillman named U. S. defense production heads with equal powers.

8 Admiral Husband E. Kimmel named to command U. S. Fleet.

20 Hitler and Mussolini meet in Germany, agree to greater Nazi participation in Mediterranean area.

22 British take Tobruk.

24 Four-day revolt of Iron Guard quelled after about 6,000 are killed in Rumania.

27 Willkie and Churchill confer in London.

Feb. 10 Britain breaks with Rumania.

11 Nazis reported flying troops into Balkans.

26 Britain wins all Somaliland in East Africa.

Mar. 1 Bulgaria joins Axis; Nazi troops move in.

11 F.D.R. signs Lend-Lease Bill.

15 British rush army to Greece as Nazis move into Balkans.

25 Yugoslavs sign with Axis, touching off riots and revolt; government flees.

30 U. S. seizes 30 Axis and 35 Danish ships in harbors here.

April 1 CIO calls Ford strike.

Soft coal strike begins.

6 Germany marches on Yugoslavia and Greece.

8 Yugoslav line breaks before mechanized invasion.

13 Belgrade falls; demoralized Yugoslavs take to the hills.

Russia, Japan sign 5-yr. neutrality pact in Moscow.

17 Yugoslavs surrender; Gen. Draja Mihailović continues guerrilla warfare.

27 Nazi tanks roll into Athens as remnants of British army quit Greece.

28 Lindbergh, called "Copperhead" by F.D.R., gives up Army Reserve commission.

May 6 Stalin takes Soviet premiership from Molotov.

10 Rudolf Hess, Nazi Deputy Fuehrer, lands in Scotland by plane.

Strike ties up \$500,000,000 ship contracts in West Coast yards.

11 Worst air raid on London takes 1,436 lives.

15 U. S. seizes *Normandie*, 10 more Vichy ships.

19 Italian forces in Ethiopia surrender to British.

20 LaGuardia named director of Office of Civilian Defense.

Nazis launch airborne invasion of Crete.

24 HMS *Hood*, biggest British warship, sunk by Nazi battleship *Bismarck*.

27 *Bismarck* sunk by British naval, air attack.

Roosevelt proclaims unlimited emergency.

June 1 Crete overrun by Nazis.

2 Hitler and Mussolini meet at Brenner Pass.

4 Ex-Kaiser Wilhelm of Germany dies at 82.

12 Harlan Fiske Stone to succeed Charles E. Hughes as Chief Justice; Jackson, Byrnes named to Supreme Court.

18 Turkey signs amity pact with Germany.

20 Ford signs with CIO.

21 British and Free French capture Damascus.

22 Hitler launches attack on Russia.

July 5 Nazis reach the Dnieper.

7 U. S. occupies Iceland bases to supplement British troops.

12 Nazis break "Stalin Line," fan out toward Kiev, Moscow, Leningrad. Britain and Russia sign war pact, bar separate peace.

- 20 British broadcast calls for "V for Victory" campaign—launching famous symbol.
- 25 U. S. freezes Japanese assets, cuts off oil, bans silk.
- Aug. 12 Pétain summons France to full support of Hitler, backs war against Russia.
House extends military service for year and a half by a single vote, 203 to 202.
- 14 F.D.R. and Churchill announce agreement on war aims, future hopes in historic Atlantic Charter.
- 20 Russians blow up Dnieper dam as Nazis sweep across Ukraine.
- 22 Nazis reach outskirts of Leningrad.
- 27 Laval wounded at review of French troops raised to fight Russia.
- 28 Iran yields to British-Soviet troops; agrees to protective occupation.
- 31 F.D.R. warns peril to nation greater than in 1939.
- Sept. 4 U. S. destroyer *Greer*, attacked by Nazi sub, fights back.
- 8 Leningrad encircled by Nazis; siege begins.
- 11 F.D.R. orders Navy "shoot first" if Axis raiders enter U. S. zone.
- 12 Germans threaten countermeasures to U. S. "shoot first" policy.
- 13 Mrs. Eleanor Roosevelt named assistant director of Office of Civilian Defense by LaGuardia.
- 19 Nazis take Kiev and Poltava.
- Oct. 3 Hitler announces Russia is defeated and "will never rise again."
- 8 Nazis take Orel in drive toward Moscow.
- 16 Jap cabinet falls in crisis; Tojo, army firebrand, new Premier.
House votes to arm American merchant ships.
- 17 U. S. destroyer *Kearny* torpedoed off Iceland; 11 lost.
- 30 U-Boat sinks U. S. destroyer *Reuben James* with loss of 100 off Iceland.
- Nov. 3 Nazis overrun Crimea, head for Sevastopol.
- 6 Maxim M. Litvinov named Russian Ambassador to U. S.
- 12 Russians halt Nazis at gates of Moscow.
- 13 House accepts neutrality act revision for arming U. S. ships.
- 15 Saburo Kurusu, Jap peace envoy, arrives at Washington.
- 18 British open powerful offensive in Libya as aid to Russians.
- 22 Nazis take Rostov.
- 26 Hull presents final terms to Jap envoys.
- Dec. 1 U.S.-Japanese tension rises as F.D.R. sees Navy chief. Japan moving troops in Indo-China; British fleet reaches Singapore.
- 6 F.D.R. sends appeal to Hirohito, urging peace.
England declares war on Finland, Rumania and Hungary.
- 7 Japan attacks Pearl Harbor, Philippines, Guam, forcing U. S. into war; Pacific Fleet crippled.
- 8 Congress votes war, 470-1; Britain declares war on Japan.
Berlin announces drive on Moscow is off for the winter.
- 9 Japs invade Malaya.
- 10 Japs land on northern Luzon in the Philippines.
Jap planes sink British battleships *Prince of Wales* and *Repulse* off Malaya.
- 11 German, Italian declarations of war on U. S. bring quick response from Congress.
- 12 Japs seize Guam, attack Midway, Wake.
- 14 Japs attack Hong Kong.
- 16 Justice Owen Roberts heads Pearl Harbor inquiry.
- 17 Chester Nimitz succeeds Kimmel as head of Pacific Fleet.
- 20 MacArthur made full general; Admiral King given top command of U. S. naval forces.
- 21 Hitler ousts Field Marshal Walther von Brauchitsch, takes supreme army command with rank of Field Marshal.
- 22 Churchill at White House for war parleys.
- 25 Hong Kong falls.
- 27 Japs bomb Manila (open city).
- 28 Japs invade Sumatra.
- DIED: Joe Penner, 36, Jan. 10; James Joyce, 58, Jan. 13; Willis VanDevanter, 89, Feb. 8; King Alfonso XIII of Spain, 54, Feb. 28; Sherwood Anderson, 64, Mar. 8; Virginia Woolf, 59, Mar. 28?; Lou Gehrig, 37, June 2; Ignace Jan Paderewski, 80, June 29; Sir Rabindranath Tagore, 80, Aug. 7; Louis Brandeis, 84, Oct. 5; Helen Morgan, 41, Oct. 8; Simon Gugenheim, 73, Nov. 2.

1942 Those little Japanese, they must be crazy! So we mumbled and fumed that Sunday afternoon. They were crazy, but they had sunk half our fleet (except the carriers), crippled a great naval base, reduced our Pacific sea power dangerously. They had driven us to panic, then into rage and confusion. We shook that off. We were in it now, up to our ears. The confusion cleared. The carping clamor of the isolationists died out—to be followed almost immediately by a shrill Communist clamor for a second front.

Russia was in desperate straits that winter. The war tempo came to America. Blackouts, air-raid wardens, civilian defense, censorship, draft boards, ration books, Knudsen-Hillman. No more automobiles. Already our planes were streaming onto English airfields; shiploads of trucks and tanks were unloading on the Persian Gulf for transit to Russia. We were in Iceland, Bermuda, on the shoulder of South America. We were in it—for keeps.

- Jan. 2 MacArthur gives up Manila; fights on for Bataan, Corregidor.
- 13 Donald Nelson made chairman of War Production Board.
- 26 U. S. troops land in Northern Ireland.
- 31 First U. S. Navy task force attack on Marshall and Gilbert Islands.
- Feb. 10 *Normandie* capsizes after fire at N. Y. pier; sabotage theory rejected by Naval officers.
- 15 British surrender Singapore.
- 23 Axis submarine shells California coast (little damage).
- 28 Japs invade Java.
- Mar. 8 They land on New Guinea at Salamaua and Lae.
- 17 MacArthur arrives in Australia from Philippines; promises to reorganize Pacific forces.
- 29 Britain offers India dominion status after war with right to quit Empire. Indian leaders reject it.
- April 9 U. S. forces on Bataan surrender.
- 14 Laval becomes Premier of France.
- 18 Tokyo and Yokohama bombed by U. S. planes from carrier *Hornet*.
- May 4-9 Jap fleet defeated with heavy loss in Battle of Coral Sea, carrier plane action.
- 6 General Wainwright surrenders Corregidor.
- 15 Gas rationing starts in 17 eastern states and D. C.
- 30 Over 1,000 RAF planes smash Cologne in war's mightiest raid.

- June 4-6 U. S. Pacific Fleet stops Jap seapower in crucial Battle of Midway.
- 10 Lidice, Czech., razed, all males put to death in Nazi terror following Heydrich assassination, Berlin announces.
- 12 Japs land on Attu in Aleutians; Jap ships reported in harbor of Kiska.
- July 2 Rommel's Afrika Korps flanked by British at El Alamein.
- 21 Leahy named F.D.R.'s chief of staff.
- Aug. 7 U. S. Marines land in Solomons, seize Tulagi and Guadalcanal, first step on road to Tokyo.
- Sept. 12 Russians temporarily halt Nazis at Stalingrad; more than 1 million engaged in crucial siege.
- Oct. 3 F.D.R. orders price, wage, rent stabilization; names Byrnes director of Office of Economic Stabilization.
- 24 Montgomery attacks Rommel's El Alamein line in Egypt.
- Nov. 3 Dewey elected N. Y. Governor by 650,000, defeating John J. Bennett, Jr.
- 8 U. S. and England land great army in French North Africa; largest invasion operation in history.
- 11 Nazis begin occupation of all France.
- 14 Eddie Rickenbacker and companions rescued after 24 days adrift in Pacific after plane crash.
- 13-15 U. S. smashes Jap armada in Solomons.
- 18 Pétain makes Laval dictator of France.
- 27 French scuttle main part of fleet at Toulon to save it from Nazis.
- 28 About 500 dead in Boston night club fire at Cocoanut Grove.
- Dec. 1 Beveridge submits cradle-to-grave security plan to end want and worry in Britain.
- 7 Pearl Harbor anniversary observed throughout U. S. with solemn pledges for victory.
- 15 MacArthur takes Buna, N. G.
- 19 British attack on Burma announced.
- 24 Darlan, 61, French turncoat and civilian administrator in Africa, assassinated.

DIED: Carole Lombard, 33, Jan. 16; Grant Wood, 49, Feb. 12; Albert Payson Terhune, 69, Feb. 18; Graham McNamee, 53, May 9; Thomas J. Mooney, 60, Mar. 6; John Barrymore, 60, May 29; May Robson, 84, Oct. 20; George M. Cohan, 64, Nov. 5; Edna May Oliver, 59, Nov. 9.

1943 The war maps showed a U. S. Army pushing the Nazis back in Tunis; Rommel's Afrika Korps streaming through Tripoli in retreat. American men, tanks and planes were in action at last.

MacArthur had stopped the Japs on New Guinea, was building a base in Australia. Our Navy had rallied in the Pacific and was getting ready to take the offensive. At home the shrill outcry for a second front mingled with the drive to sell war bonds, scrap metal drives. Beneath these surface excitations was the steady roar of machinery, the surge and thunder of blast furnaces and rolling mills. The blueprint stage was past. We were making the stuff.

Eighteen miles northwest of Knoxville that winter, woodsmen were clearing a Tennessee hillside. A building operation was about to begin, Manhattan Project, at Oak Ridge, something connected with science, and the war.

Jan. 11 F.D.R. calls for \$100 billion for war.

14-24 Casablanca Conference: Roosevelt and Churchill agree on unconditional surrender goal.

18 Russians announce breaking of 17-month Leningrad siege.

27 First all-U. S. air raids over Reich.

31 German 6th Army reported virtually destroyed at Stalingrad; turning point of war in Russia.

Feb. 9 Japanese evacuate Guadalcanal.

11 Dwight D. Eisenhower made full general; will command Allied armies in North Africa.

16 Russians take Kharkov.

Mar. 2-3 Japs lose 10 warships, 12 transports as Allied planes smash convoy in Battle of Bismarck Sea.

28 British crash Mareth Line in Tunisia.

April 7 Advance forces of U.S. 2nd Army and British 8th Army meet in Tunisia.

8 President curbs prices, pay, job changing.

19 Reports tell of Nazi annihilation of 2,000,000 European Jews by gas chamber, mass execution.

May 7 Americans take Bizerte; British seize Tunis.

11 Americans land on Attu in Aleutians.

12 Remnants of Nazis trapped on Cape Bon, ending war in Africa.

15 Third International (Comintern) dissolved in Moscow.

June 1 Leslie Howard, 50, lost in plane believed shot down by Nazis.

4 House votes drastic antistrike bill.

22 Army enters Detroit to quell race riots.

30 MacArthur makes landings at New Guinea, Trobriand, Rendova.

July 9 Allies invade Sicily.

25 Mussolini deposed. King and Pietro Badoglio rule Italy.

Aug. 17 Sicily conquest complete as Messina is captured.

21 Russians replace Litvinov as U. S. Ambassador with Andrei Gromyko.

Sept. 3 British Eighth Army lands in Italy, crossing Strait of Messina.

4 MacArthur lands near Lae, N. G.

8 Italy's unconditional surrender announced.

9 Mark Clark's Fifth invades at Salerno.

10 Nazis seize Rome.

25 Edward Stettinius, Jr., named to replace Sumner Welles as Undersecretary of State.

Oct. 13 Italy declares war on Germany.

19-Nov. 1 Moscow Conference: Hull, Eden, Molotov pledge unity to win war and establish world organization; promise democratic Italy and free Austria.

Nov. 6 Russians retake Kiev.

20 Marines land at Tarawa and other Gilbert islets.

22-26 Cairo Conference: Roosevelt, Churchill, Chiang pledge defeat of Japan, free Korea.

26 Russians retake Gomel.

28-Dec. 1 Teheran Conference: Roosevelt, Churchill, Stalin agree on invasion plans.

Dec. 24 Eisenhower named to command invasion of Europe.

26 Nazi pocket battleship *Scharnhorst* sunk by British off northern Norway.

Marines land on Cape Gloucester, New Britain.

27 U. S. seizes railroads to bar strike.

DIED: George Washington Carver, 79, Jan. 5; Alexander Woollcott, 56, Jan. 23; Stephen Vincent Benet, 44, Mar. 13; J. P. Morgan, 75, Mar. 13; Conrad Veidt, 50, Apr. 3; Edsel Ford, 49, May 26; Sergei Rachmaninoff, 69, May 28; William Lyon Phelps, 78, Aug. 21; Ben Bernie, 52, Oct. 20; Max Reinhardt, 70, Oct. 31; Fats Waller, 39, Dec. 15.

1944 Through the big staging depots behind the seaport cities endless streams of men moved toward the docks. Trainloads, busloads; sunburned, hardened soldiers loaded with gear, men of college age, weaned from family and home; tough, casual young Americans on their way to war.

Railway stations and bus terminals eddied with hurrying, uniformed figures. Broadway and Main Street were overrun. War had reached concert pitch. England bulged with uniformed men, fighter and bomber pilots, tanks, trucks, matériel. Ships in great sprawling convoys were moving across the Atlantic; tankers, troopships, supply ships, ammunition ships, LST's, LCI's, assembling around the rim of the British Isles for D-Day.

In the Pacific, Task Force 58 with its new fast Essex class carriers was ranging from the Solomons to the Gilberts and Marshalls. The Navy was about to begin its swift relentless conquest of the Pacific stepping stones to Japan.

Jan. 4 Russian army over Polish line.

11 F.D.R. calls for a national service law to prevent strikes.

22 Allied troops land behind German lines at Anzio near Rome.

31 Marines and Army troops land on Kwajalein Atoll in the Marshalls.

Feb. 15 The Abbey of Monte Cassino bombed by Allied planes.

29 American troops land on Admiralty Islands in the Pacific.

Mar. 4 U. S. planes attack Berlin for the first time.

19 Russians reach Rumanian border.

April 5 Wendell L. Willkie withdraws from Presidential race.

10 Russians retake Odessa.

26 U. S. Army seizes Montgomery Ward and Company in Chicago as a result of a strike.

May 9 Russians retake Sevastopol.

18 Germans evacuate Cassino.

June 4 Rome falls to the Allies.

6 American, British and Canadian forces land in France, D-Day.

11 Russians open drive against Finland.

15 New B-29 Superfortresses bomb Japan for the first time.

Germans begin robot bomb attacks on England.

26 Cherbourg falls to the Allies.

28 Governor Thomas E. Dewey of New York is nominated for President.

July 3 Minsk, last great Russian city held by Nazis, taken by Russians.

6 152 die, 250 are hurt in Hartford, Conn., circus fire.

8 Saipan conquest is complete.

20 Hitler wounded in bomb plot.

F.D.R. nominated for President.

American forces land on Guam.

21 Harry Truman nominated for Vice President.

Aug. 2 Turkey breaks off diplomatic relations with Germany.

15 Allies land in south France.

23 Marseilles, Grenoble fall.

25 Paris freed by U. S. and French troops.

Sept. 4 Antwerp, Brussels fall to Allies.

Finns quit war with Russia, ask Germans to leave the country.

11 Americans enter Germany.

14 Marine 1st Division lands in Palau.

17 Allied air-borne army lands in Holland.

24 Czechoslovakia and Hungary are invaded by Red army.

Oct. 4 American forces break through the German Westwall.

6 Moscow announces Second Ukrainian Army invaded Hungary.

13 U.S.S.R. captures Riga, Latvia.

20 U. S. troops invade the Philippines.

Aachen falls to the Americans after nineteen days.

28 Bulgaria signs Soviet armistice terms.

Nov. 7 President Roosevelt re-elected for a fourth term.

16 Allies launch general offensive on 300-mile front.

27 Cordell Hull resigns as Secretary of State.

Edward Stettinius, Jr., named Secretary of State.

Dec. 15 Americans land on Mindoro, 150 miles from Manila.

16 German counteroffensive launched in Belgium.

24 Americans temporarily halt the Nazis on the ninth day with help of 7,000-plane raid.

29 Russians penetrate into Budapest, Hungary.

DIED: William Allen White, 75, Jan. 29; Irvin S. Cobb, 67, Mar. 10; Hendrik Van Loon, 62, Mar. 11; Frank Knox, 70, Apr. 28; Aimee Semple McPherson, 53, Sept. 27; Al Smith, 70, Oct. 4; Wendell Willkie, 52, Oct. 8; Boake Carter, 46, Nov. 16; Glenn Miller, 35, Dec. 15; Harry Langdon, 60, Dec. 22; Charles Dana Gibson, 77, Dec. 23; Romain Rolland, 78, Dec. 30.

1945 It was mostly downhill now. The great American war potential had delivered the goods. America's industrial strength, translated into tanks, trucks, planes, jeeps, was closing in on Germany. The Battle of the Bulge was the Nazis' last desperate stroke and it didn't quite come off. Along the Pacific seaboard, Navy convoys were loading for Iwo and Okinawa. From newly captured Saipan and Tinian, B-29's were pounding Japan's industrial centers to rubble. The war had come to its last decisive phase. Here at home the nation thurned with ultimate activity. Everyone had a job, everyone had money. Hotels, night clubs, theaters, roadhouses, juke joints reflected the tension and hysteria. Victory was in the air.

- an. 9 General Douglas MacArthur lands invasion force in Lingayen Gulf, Luzon; wins 15-mile beachhead.
- 12 German line crumbles; Allies regain 100 square miles in "Bulge."
- 17 Russians take Warsaw by encirclement.
- 21 Jesse Jones out of Cabinet to make way for Henry Wallace as Secretary of Commerce.
- 24 Russians cross the Oder.
- 26 Yankees sold to McPhail-Topping syndicate for \$3,000,000.
- 30 U. S. Rangers rescue 513 from Jap prison camp in daring Luzon raid.
- eb. 3 U. S. Army breaches Westwall; drives last Nazis from Belgium. U. S. troops enter Manila.
- 5 Trapped Japs fire Manila, business area in flaming ruins. Third Army smashes through Siegfried Line.
- 7 Russians reach outer defenses of Berlin.
- 12 Big Three at Yalta agree to disarm Germany forever.
- 13 Russians take Budapest after 50-day siege.
- 19 U. S. Marines land on Iwo Jima.
- 23 Marines raise flag on Mt. Suribachi.
- 24 Egyptian Premier assassinated as Egypt declares war on Axis.
- ar. 2 U. S. Ninth Army reaches Rhine at Düsseldorf.
- 7 Lt. Gen. Courtney H. Hodges' First Army crosses Rhine south of Cologne.
- 10 B-29s begin incendiary raids on Japan, set great fires in Tokyo.
- 16 Iwo Jima, toughest Pacific Island, falls to U. S. after 26-day assault.

22 Field Marshal Albert Kesselring takes Nazi command in West, replacing Field Marshal Karl R. G. von Rundstedt.

Patton's Third Army crosses the Rhine.

30 Russians take Danzig.

April 1 U. S. Tenth Army invades Okinawa.

5 Second Japanese Cabinet falls.

11 Ninth Army reaches the Elbe in 50-mile surge; Russians drive past Vienna.

12 F. D. Roosevelt, 63, dies of cerebral hemorrhage at Warm Springs, Ga., at 3:35 P.M. Harry S. Truman sworn in to succeed him.

13 Russians take Vienna, seize 120,000 Nazis.

16 Truman, taking office, pledges unconditional surrender, international organization for peace as his goals.

18 Ernie Pyle, 44, killed on Ie Shima.

20 Seventh Army takes Nuremberg.

21 Russians edge into Berlin.

23 Nicholas Murray Butler retires after 44 years as president of Columbia University.

25 United Nations parley opens at San Francisco.

Americans and Russians meet on the Elbe.

26 Bremen falls to British; Henri Philippe Pétain captured at French border.

28 Benito Mussolini, 61, and mistress Clara Petacci killed at Lake Como; bodies exhibited in streets of Milan next day.

30 Russian flag raised over Reichstag.

May 1 Grand Admiral Karl Doenitz takes command in Germany, announcing death of Hitler, 58.

2 Berlin falls.

4 Nazis give up Denmark, Netherlands, North Germany.

7 Germany surrenders unconditionally at 2:41 A.M. (French time).

11 Kamikaze attacks on U. S. carrier *Bunker Hill* kills 373 off Okinawa.

23 Truman in postwar cabinet shift replaces Attorney Gen. Francis Biddle with Tom C. Clark, Secretary of Agriculture Claude E. Wickard with Clinton P. Anderson, Frances Perkins, Secretary of Labor, with Lewis B. Schwellenbach.

Churchill dissolves British war cabinet; calls election.

- Admiral Doenitz and aides seized. Heinrich Himmler, 44, commits suicide by poison.
- 26 Vast Tokyo area—18.6 square miles—burned out by double raid of B-29s.
- June 6** Gov. Thomas E. Dewey names anti-discrimination board to combat racial and religious discrimination in employment.
- 14 Joachim von Ribbentrop, Nazi foreign minister, seized in Hamburg.
- 21 Okinawa won by U. S. Tenth Army.
- 26 United Nations Charter signed at San Francisco.
- 27 Edward R. Stettinius, Jr., resigns as Secretary of State to become U. S. delegate to United Nations.
- July 2** James F. Byrnes named Secretary of State.
- 13 U. S. surface fleet begins bombardment of Japan.
- 15 Lights in Britain shine at night for first time since Sept. 3, 1939.
- 17 Truman, Churchill, Stalin meet at Potsdam for final war conference.
- 21 U. S. serves Japan with unconditional surrender ultimatum on Potsdam terms.
- 28 Churchill out, Attlee in as British election returns show overwhelming sweep for Labour party.
- Attlee replaces Churchill at Potsdam conference.
- 28 Army bomber crashes into Empire State Building in fog; 13 killed, 26 hurt.
- Aug. 2** Potsdam parley agrees on future of Germany; reparations, peace preliminaries.
- 6 Hiroshima blasted by atomic bomb dropped by U. S. Army Air Force. (Trial bomb tested in New Mexico, July 16.)
- 8 Russia declares war on Japan.
- 9 Nagasaki hit by second atomic bomb.
- 10 Japan submits surrender offer; asks Emperor retain sovereignty.
- 14 Japan accepts surrender terms; war ends. MacArthur to direct occupation.
- 16 Pétain guilty of treason; death sentence commuted to life imprisonment by Provisional President Charles de Gaulle.
- 27 U. S. Third Fleet enters Japanese waters.
- 30 MacArthur lands in Japan.
- Sept. 2** Japanese sign surrender aboard battleship *Missouri* in Tokyo Bay. V-J Day.
- Stalin in victory broadcast claims Kuriles and Sakhalin for Russia.
- 11 Gen. Hideki Tojo, wartime premier, shoots himself in futile suicide attempt.
- 14 Ford production halts; 50,000 made idle by wave of suppliers' strikes.
- 18 Robert P. Patterson, Under Secretary, succeeds Henry L. Stimson as Secretary of War.
- Oct. 3** Truman suggests world ban atom bomb in war; asks federal control on atomic development in U. S.
- 9 Pierre Laval, 62, sentenced to die as traitor (dies Oct. 15).
- 18 Twenty-four Nazi ringleaders indicted as war criminals.
- 23 President Truman calls for universal military training for U. S. youth in peacetime.
- 29 Getulio Vargas resigns as President of Brazil after 15-year regime.
- Nov. 6** O'Dwyer elected Mayor of N. Y.; Tammany back after 12 years.
- 15 Truman, Attlee, King decide in Washington conference that atom bomb secrets will not be shared until United Nations devise firm control plan.
- 20 General Motors strike called; 200,000 out next day.
- Dec. 12** Truman names fact-finding board in General Motors strike.
- 15 Prince Fumimaro Konoye, three times premier of Japan, commits suicide rather than face trial.
- 16 Truman names Secretary Byrnes, Stettinius, Senator Tom Connally, and Mrs. Eleanor Roosevelt delegates to the United Nations.
- 21 Gen. George S. Patton, Jr., 60, dies of injuries in motor accident.
- Archbishop Francis J. Spellman, three others in U. S. among 32 named Cardinals by Pope.
- 27 Big Three agree on Atomic Energy Commission for United Nations.
- DIED:** Thomas J. Pendergast, 72, Jan. 26; David Lloyd George, 82, Mar. 26; Joseph Goebbels, 47, May 3?; Alla Nazimova, 66, July 13; Franz Werfel, 54, Aug. 26; John McCormack, 61, Sept. 16; Jerome Kern, 60, Nov. 11; Robert Benchley, 56, Nov. 21; Theodore Dreiser, 74, Dec. 28.

946 The first full year of peace. Peace? Labor fought capital in the U. S. as never before—four and a half million men were involved in strikes. Congress and President Truman fought over price controls. Results: prices boomed. You could pay \$2.75 for one hamburger at a restaurant, or \$17.50 for one shirt. Peace? You should have heard what the Republicans called the Democrats. The Republicans won Congress. Peace? Interminable wrangling among the Big Four victors. Finally they grudgingly agreed on compromise peace treaties, but only for the small-fry enemies, not for Germany or Japan. And the shaky walls of the young United Nations edifice were almost knocked down by the quarrels between Russia and the Western nations. A total of 11,000 divorces was granted in Reno—an all-time record. The U. S. nonfiction best seller was *Peace of Mind*.

an. 3 William Joyce ("Lord Haw Haw" on German radio) is hanged in London as traitor.

7 American occupation troops hold mass demonstrations saying they "wanna go home"; demonstrations spread to India, Korea, Japan, Philippines, France, Germany.

10 U. S. Army hits the moon with radar impulses.

General Assembly of the United Nations meets first time in London.

15 200,000 CIO electrical workers strike.

17 United Nations Security Council meets for the first time in London.

20 General Charles de Gaulle resigns as President of France.

21 750,000 steel workers strike.

21 Truman warns of inflation and subsequent depression.

24 U. N. General Assembly creates Atomic Energy Commission.

25 John L. Lewis and his United Mine Workers rejoin American Federation of Labor, which they had bolted in 1936.

b. 12 State Department accuses Argentina of helping Nazis plot conquest in South America.

13 Ickes, Secretary of the Interior for thirteen years, resigns.

24 Argentina elects Perón President.

ar. 4 England, France and U. S. publish documents showing Franco's collaboration with Axis, and call on the Spanish people for "peaceful withdrawal" of Franco.

6 Japan publishes draft of new constitution abolishing army, navy, air forces forever, making war unconstitutional.

April 1 400,000 UMW soft-coal miners begin nationwide strike.

3 Firing squad executes Lt. Gen. Masaharu Homma, who ordered Bataan Death March.

8 League of Nations meets for last time in Geneva; puts itself out of existence (Apr. 18).

25 Council of Foreign Ministers (Byrnes, Bevin, Molotov and Bidault) meets in Paris to draw up peace treaties for Italy, Rumania, Hungary, Bulgaria and Finland.

29 U. S. proposes treaty with England, Russia and France to keep Germany disarmed twenty-five years.

May 9 King Victor Emmanuel III abdicates, hoping Italy's monarchy can be saved by his son, Humbert, who takes throne.

17 Truman seizes railroads in face of strike threat.

June 2 Italy votes to abolish monarchy.

3 Twenty-eight Japanese war leaders go on trial in Tokyo.

6 John Wesley Snyder named Secretary of Treasury; Fred M. Vinson, Chief Justice.

11 Truman vetoes Case Bill restricting strikes.

29 Truman vetoes price control bill, letting OPA expire; but he hopes Congress will extend the present law. Congress does not; OPA expires.

British arrest 2,718 Jews in Palestine, trying to round up terrorists.

July 1 Army superfortress drops atom bomb in first test at Bikini Atoll; 5 ships sunk, 9 heavily damaged.

4 U. S. grants Philippines independence.

Mobs kill 36 Jews in pogrom in Kielce, Pol.

13 Congress approves \$3,750,000,000 loan to England.

15 Yugoslavia condemns General Mikhailović to be shot.

17 Isolationist Senator Burton K. Wheeler beaten for Democratic renomination in Montana after twenty-four years in Senate.

- 25 Second atom bomb is tested at Bikini, exploded under water; battleship, aircraft carrier and eight other craft sent to bottom. OPA is revived after lapse of twenty-five days as Truman signs new bill.
- 26 Congress puts U. S. atom control in hands of civilian board.
- 29 Twenty-one nations assemble in Paris to discuss peace treaties with Italy, Bulgaria, Rumania, Hungary and Finland. Treaties had been prepared by Big Four Council of Foreign Ministers, with some points still in dispute.
England accepts American proposal for economic cooperation between their German occupation zones
- Aug. 13** Russia reveals it has demanded from Turkey a share in the military control of the Dardenelles.
- 14 La Follette dynasty in Wisconsin is overthrown when Republicans fail to renominate Sen. Robert M. La Follette, Jr.
- 21 U. S. gives Yugoslavia 48 hours to free occupants of U. S. planes forced down over Yugoslavia.
- 22 Yugoslavia frees 7 Americans held since Aug. 9.
- Sept. 1** Greece votes to bring back King George II.
- 2 First all-Indian government inaugurated; Jawaharlal Nehru heads cabinet.
- 8 Nine-year-old King Simeon II of Bulgaria loses his throne as nation votes to abolish monarchy.
- 20 Truman fires Henry Wallace from the Cabinet.
- 24 Stalin says he sees no real danger of war with U. S. and Britain.
- Oct. 1** Twelve top Nazis sentenced to die by Nuremberg tribunal; seven sent to prison; three acquitted.
Truculent Turtle, Navy plane, sets nonstop distance record, flying 11,236 miles from Perth, Australia, to Columbus, Ohio, in 55 hours, 15 minutes.
- 12 Henry Wallace becomes editor of *New Republic*.
- 13 France adopts a new constitution, by narrow margin of 1,000,000 votes, despite De Gaulle's opposition.
- 15 Paris Peace Conference adjourns; disputed points will go back to Council of Foreign Ministers for final decision.
Goering, 53, kills himself with cyanide of potassium a few hours before ten other Nazis are executed at Nuremberg.
- 22 German Social Democratic party protests deportation of German workers to Soviet Union.
- Nov. 4** British disclose that Hindu-Muslim riots in India have cost 5,018 lives in the last four months.
- 5 Republican landslide overturns Democratic control of Senate and House.
- 6 U. S. proposes to put Japanese Pacific islands under United Nations trusteeship.
- 9 Truman ends all price and wage controls, except on rents, sugar and rice.
- 15 Dutch end 15-month strife in Java by tentatively recognizing Indonesian Republic.
- 21 National strike of UMW soft-coal miners begins.
- Dec. 1** Miguel Alemán sworn in as President of Mexico.
- 2 James C. Petrillo, charged with violation of Lea Act, is acquitted by Federal judge in Chicago.
- 3 O. Max Gardner named Ambassador to Great Britain.
- 4 Judge Goldsborough fines John L. Lewis \$10,000 and UMW \$3,500,000 for not calling off coal strike (UMW fine reduced to \$700,000 by Supreme Court, Mar. 6, 1947).
- 6 Dr. Julian Huxley elected director-general of UNESCO.
- 7 Worst disaster of the year in U. S.—pre-dawn fire sweeps Wincoff Hotel in Atlanta, Ga., killing 119.
- 14 U. N. accepts Rockefeller gift of permanent headquarters site in midtown New York City.
- 9 U. N. Assembly unanimously votes resolution for general disarmament.
- 30 U. N. Atomic Energy Commission accepts U. S. atom control plan, 10 to 0, Russia and Poland abstaining.
- DIED:** Slim Summerville, 51, Jan. 5; Harry Hopkins, 55, Jan. 29; E. Phillips Oppenheim, 80, Feb. 3; George Arliss, 77, Feb. 5; Booth Tarkington, 76, May 19; Jack Johnson, 68, June 10; William S. Hart, 73, June 23; Gertrude Stein, 72, July 27; Tony Lazzeri, 42, Aug. 7; H. G. Wells, 79, Aug. 13; Joachim von Ribbentrop, 53, Oct. 16; James J. Walker, 65, Nov. 18; Damon Runyon, 62, Dec. 10; Walter Johnson, 59, Dec. 10; Eugene Talmadge, 62, Dec. 21; W. C. Fields, 66, Dec. 25.

1947 The United States grew tired of seeing small nations sucked into the Soviet orbit, so the Truman Doctrine was born to bolster Greece and Turkey against Communism. But this wasn't enough. By summer the Marshall Plan was born—a vast, four-year project by which the United States would pour out billions to put sixteen democracies of Western Europe back on their feet economically. Here at home we were harassed by the high cost of living. Eggs: \$1 a dozen; butter and steak: \$1 a pound. Income tax: still at war peak, and Truman vetoed cuts passed by Republican Congress. To top it all, Paris fashion designers told women to throw away their dresses and get the long-skirt New Look; meekly, they did.

Jan. 1 England nationalizes all coal mines.

U.S. transfers control of domestic atomic energy development from Army to civilian commission.

6 Lt. Gen. Lucius D. Clay appointed commander of U.S. forces in European theater; Lt. Gen. Geoffrey Keyes named chief of U.S. occupation forces in Austria.

7 Secretary of State Byrnes resigns; Gen. George Marshall succeeds him.

16 Vincent Auriol elected first President of Fourth French Republic.

17 Paul Ramadier, Socialist, named first Premier of new French constitutional government.

26 Grace Moore, 45, American opera star, and Prince Gustavus Adolphus of Sweden killed with 20 others in crash of Dutch plane at Copenhagen.

Feb. 5 Boleslaw Bierut elected President of Poland.

10 Peace treaties for Italy, Rumania, Bulgaria, Hungary and Finland are signed in Paris.

13 Security Council votes 10-0, U.S.S.R. abstaining, to set up new Commission on Conventional Armaments.

17 British capture 22nd shipload of Jewish refugees trying to smuggle themselves into Palestine; deport them to Cyprus.

20 Britain announces she will withdraw from India by June, 1948, regardless of whether India has established government by then.

26 Lewis W. Douglas named U.S. Ambassador to Britain.

28 France and England announce 50-year treaty of alliance; to be signed Mar. 4.

Mar. 2 Chinese Executive Yuan announces resignation of Premier T. V. Soong.

4 Russia rejects U.S. plan for control of atomic energy by U.N.

6 Supreme Court finds John L. Lewis guilty of contempt for failing to call off coal strike in November.

10 Big Four Council of Foreign Ministers begins Moscow meeting to draw up peace treaties for Italy and Germany.

12 Truman asks Congress for \$400 million to save Greece and Turkey from Communist expansionism.

31 Draft law expires; many war-time controls go off. Sugar rationing stays.

Apr. 1 King George II of Greece dies of heart attack; his brother takes throne as Paul I.

2 Security Council approves U.S. trusteeship of former Japanese-mandated Pacific islands.

9 Senate confirms, 50-31, nomination of David E. Lillienthal and 4 other members of U.S. Atomic Energy Commission after 10-week fight.

14 General Motors settles wage dispute with United Electrical Workers (CIO) with 15-cent-an-hour wage increase setting pattern for industries.

16-18 Nitrate ship *Grandcamp* blows up at Texas City, Tex.; more than 500 killed; \$50 million damage.

May 4 Socialist Premier Paul Ramadier ejects Communists from French Cabinet.

15 U.N. General Assembly ends first special session after voting, 46-7, for 11-nation inquiry committee on Palestine.

21 All 28 defendants in South Carolina mass lynching trial acquitted, despite statements confessing participation.

23 U.N. Balkan Inquiry Commission finds Yugoslavia, Bulgaria and Albania blameworthy for aiding Greek guerrilla forces waging civil war.

26 Revolution in Nicaragua; Gen. Anastasio Somoza seizes power.

June 5 Marshall says U.S. may have to spend billions to put Europe on its feet economically (Marshall Plan).

11 U.S. ends sugar rationing, last of wartime controls.

- 16 Truman vetoes income tax reduction bill; House upholds veto next day.
- 23 Senate enacts Taft-Hartley Bill curbing labor unions over Truman veto.
- 27 Foreign Ministers of Britain, U.S.S.R. and France meet in Paris to discuss Marshall Plan.
- July** 6 Generalissimo Franco holds plebiscite in Spain to ratify his dictatorship; wins by large margin.
- 8 Coal strike averted as United Mine Workers win biggest pay boost in history—44½ cents an hour.
- 12 Paris conference on Marshall Plan to reconstruct Europe opens with 16 nations attending and 8 nations boycotting (at behest of Russia).
- 20 Dutch troops launch offensive in Java against native Indonesian Republic.
- 25 Congress passes bill to merge U.S. armed forces under single Secretary of Defense; Truman signs next day.
- Aug.** 1 U.N. Security Council orders Dutch and Indonesians to cease hostilities in Java.
- 10 William P. Odom flies alone around world in fastest time ever—19,645 mi. in 73 hr., 5 min., 11 sec.
- 11 Construction of first peacetime atomic-energy pile begins at Brookhaven, L.I., nuclear research center.
- 15 Freedom comes to India, split into two states—India (mostly Hindu) and Pakistan (mostly Moslem).
- 19 Two Soviet vetoes kill Security Council effort to resolve Balkan crisis involving Greece, Bulgaria, Yugoslavia and Albania.
- 27 England cuts meat ration to 20 cents a person a week to keep from bankruptcy; bans all pleasure motoring after Oct. 1.
- Sept.** 2 19 American nations sign treaty of Rio de Janeiro, promising to help each other put down aggression.
- 11 Food prices in U.S. reach new record high levels.
- 15 Peace treaties for Italy, Rumania, Hungary, Bulgaria and Finland go into effect at midnight.
- 16 Second annual session of U.N. General Assembly opens at Flushing Meadow Park, New York City.
- 18 Deputy Foreign Minister Vishinsky of Russia accuses U.S. of instigating propaganda for third world war; asks U.N. to stop us.
- 22 16 European nations complete in Paris their report on Marshall Plan; say Europe will need \$15.81 billion in credits from U.S. in next 4 years.
- 27 Sen. J. Howard McGrath becomes chairman of Democratic National Committee, replacing Robert E. Hannegan.
- Oct.** 5 Moscow announces formation of new Communist international organization, "Cominform," aimed at U.S. "Imperialism."
- Truman calls for meatless Tuesdays, eggless and poultryless Thursdays to save grain for Europe.
- 9 U.S. reveals pilotless rocket plane attained speed of 1,500 mi. an hour.
- 28 Congressional inquiry into Communism in Hollywood cites 10 screen writers for contempt for failing to say whether they are or ever were Communists.
- Nov.** 2 Howard Hughes flies world's biggest plane, built for 500 passengers.
- 3 Stanislaw Mikolajczyk, leader of Poland's Peasant party, which opposed Communist domination, arrives in England by plane to avoid being "killed like a sheep."
- 5 U.N. Assembly approves sending commission to Korea to set up free government; Russia boycotts it.
- 17 Truman asks for power to revive price controls and rationing if necessary.
- 20 Princess Elizabeth of England is married to Lt. Phillip Mountbatten.
- 29 U.N. Assembly approves partitioning of Palestine.
- DIED:** Al Capone, 48, Jan. 25; Grace Moore, 45, Jan. 26; Adm. Marc A. Mitscher, 60, Feb. 3; Johnny Evers, 65, Mar. 28; Henry Ford, 83, Apr. 7; Benny Leonard, 51, Apr. 18; Christian X of Denmark, 76, Apr. 20; Lewis E. Lawes, 63, Apr. 23; Louise Homer, 76, May 6; Hal Chase, 64, May 18; Jimmie Lunceford, 45, July 13; Theodore G. Bilbo, 69, Aug. 21; Fiorello H. LaGuardia, 64, Sept. 20; Harry Carey, 69, Sept. 21; Dudley Digges, 68, Oct. 24; Ernst Lubitsch, 55, Nov. 30.

★ WHO'S WHO ★

LEADERS IN THE ARTS, PUBLIC AFFAIRS, AND SCIENCES LEADING ASSOCIATIONS AND SOCIETIES

Prepared by

A. N. MARQUIS CO., Publishers of WHO'S WHO

Art

- ALBRIGHT, Ivan Le Lorraine (painter); b. Chicago, Ill., Feb. 20, 1897.
- ALBRIGHT, Malvin (painter, sculptor); b. Chicago, Ill., Feb. 20, 1897.
- ARCHIPENKO, Alexander (sculptor); b. Kiev, Rus., May 30, 1887.
- BENTON, Thomas Hart (painter); b. Neosho, Mo., Apr. 15, 1889.
- BRANCUSI, Constantin (sculptor); b. Rumania, 1876.
- BRANGWYN, Sir Frank (painter); b. Bruges, Belg., May 13, 1867.
- BRAQUE, Georges (painter); b. France, 1881.
- BROOK, Alexander (painter); b. Brooklyn, N. Y., July 14, 1898.
- BURCHFIELD, Charles E. (watercolorist); b. Ashtabula, Ohio, Apr. 9, 1893.
- CADMUS, Paul (painter, etcher); b. New York City, Dec. 17, 1904.
- CALDER, Alexander ("mobile" sculptor); b. Lawnton, Pa., July 22, 1898.
- CARROLL, John (painter); b. Wichita, Kans., Aug. 14, 1892.
- CHAGALL, Marc (painter); b. Russia, 1887.
- CHIRICO, Giorgio de (painter); b. Volo, Gr., July 10, 1888.
- COVARRUBIAS, Miguel (illustrator); b. Mexico City, Mex., 1902.
- DALI, Salvador (painter); b. Figueras, Sp., May 11, 1904.
- DAVIDSON, Jo (sculptor); b. New York City, Mar. 30, 1883.
- DAVIS, Stuart (painter); b. Philadelphia, Pa., Dec. 7, 1894.
- DERAIN, André (painter); b. Chatou, Fr., June 10, 1880.
- DUFY, Raoul (painter); b. 1878.
- EPSTEIN, Jacob (sculptor); b. New York City, Nov. 10, 1880.
- FEININGER, Lyonel (painter); b. New York City, July 17, 1871.
- GROPIUS, Walter (architect); b. Berlin, Ger., May 18, 1883.
- GROPPER, William (painter); b. New York City, Dec. 3, 1897.
- GROSZ, George (painter); b. Berlin, Ger., July 26, 1893.
- HASELTINE, Herbert (sculptor); b. Rome, It., Apr. 10, 1877.
- HOPPER, Edward (painter); b. Nyack, N. Y., July 22, 1882.
- JONES, Robert Edmond (stage designer); b. Milton, N. H., Dec. 12, 1887.
- KANTOR, Morris (painter); b. Russia, Apr. 15, 1896.
- KARFIOL, Bernard (painter); b. Budapest, Hung., May 6, 1886.
- KENT, Rockwell (painter); b. Tarrytown Heights, N. Y., June 21, 1882.
- KOKOSCHKA, Oskar (painter); b. Pöchlarn, Aus., Mar. 1, 1886.
- KROLL, Leon (painter); b. New York City, Dec. 6, 1884.
- KUHN, Walt (painter); b. New York City, Oct. 27, 1880.
- KUNIYOSHI, Yasuo (painter); b. Okayama, Jap., Sept. 1, 1893.
- LE CORBUSIER (Charles-Édouard Jeanneret) (architect); b. La Chaux De Fonds, Switz., Oct. 6, 1887.
- LIPCHITZ, Jacques (sculptor); b. Lithuania, 1891.
- MARIN, John (watercolorist); b. Rutherford, N. J., Dec. 23, 1872.
- MARSH, Reginald (painter, etcher); b. Paris, Fr., Mar. 14, 1898.
- MATISSE, Henri (painter); b. Cateau, Fr., Dec. 31, 1869.
- MATTA (Matta Echaurren) (painter); b. Chile, 1912.
- MATTSON, Henry (painter); b. Gothenburg, Swed., Aug. 7, 1887.
- MESTROVIČ, Ivan (sculptor); b. Yugoslavia, 1883.
- MIELZINER, Jo (stage designer); b. Paris, Fr., Mar. 19, 1901.

(For Leaders in Sports, see Sports Section)

- MILLES, Carl (sculptor); b. Uppsala, Swed., June 23, 1875.
- MIRÓ, Joan (painter); b. Barcelona, Sp., Apr. 21, 1893.
- MOORE, Henry (sculptor); b. Castleford, Eng., July 30, 1898.
- MOSES, Grandma (Anna Mary) (painter); b. Greenwich, N. Y., Sept. 7, 1860.
- NOGUCHI, Isamu (sculptor); b. Los Angeles, Calif., Nov. 7, 1904.
- O'KEEFE, Georgia (painter); b. Sun Prairie, Wis., Nov. 15, 1887.
- OROZCO, José (painter); b. Zapotlán, Mex., 1883.
- PEIRCE, Waldo (painter); b. Bangor, Maine, 1884.
- PICASSO, Pablo (painter, sculptor); b. Málaga, Sp., Oct. 25, 1881.
- PORTINARI, Candido (painter); b. Brazil, 1903.
- QUINTANILLA, Luis (painter); b. Santander, Sp., June 13, 1895.
- RATTNER, Abraham (painter); b. Poughkeepsie, N. Y., July 8, 1895.
- RIVERA, Diego (painter); b. Guanajuato, Mex., Dec. 8, 1886.
- ROBINSON, Boardman (painter); b. Somerset, Nova Scotia, Sept. 6, 1876.
- ROUAULT, Georges (painter, lithographer); b. Paris, Fr., May 27, 1871.
- SAARINEN, Eliel (architect); b. Helsingfors, Fin., 1873.
- SAMPLE, Paul (painter); b. Louisville, Ky., Sept. 14, 1896.
- SEGONZAC, André Dunoyer de (painter); b. France, 1885.
- SHEELER, Charles (painter); b. Philadelphia, Pa., July 16, 1883.
- SIMONSON, Lee (stage designer); b. New York City, June 26, 1888.
- SIQUEIROS, David (painter); b. Mexico, 1894.
- SLOAN, John (painter); b. Lock Haven, Pa., Aug. 2, 1871.
- SPEICHER, Eugene (painter); b. Buffalo, N. Y., Apr. 5, 1883.
- STERNE, Maurice (painter, sculptor); b. Libau, Rus., July 13, 1878.
- TANGUY, Yves (painter); b. France, 1900.
- TCHELITCHCHEW, Pavel (painter); b. Russia, 1898.
- UTRILLO, Maurice (painter); b. Paris, Fr., Dec. 25, 1883.
- VLAMINCK, Maurice de (painter); b. Paris, Fr., Apr. 4, 1876.
- WEBER, Max (painter); b. Bialystock, Rus., Apr. 18, 1881.
- WRIGHT, Frank Lloyd (architect); b. Richland Center, Wis., June 8, 1869.
- ZORACH, William (sculptor); b. Eurburg, Lith., Feb. 28, 1887.

Concert Music

- ALBANESE, Licia (soprano); b. Bari, It., July 22, 1913.
- ALDA, Frances (soprano); b. Christchurch, N. Z., May 31, 1885.
- ANDERSON, Marian (contralto); b. Philadelphia, Pa., Feb. 17, 1902.
- ANTHEIL, George (composer); b. Trenton, N. J., July 8, 1890.
- ARRAU, Claudio (pianist); b. Chillan, Chile, Feb. 6, 1904.
- BABIN, Victor (pianist); b. Moscow, Rus., Dec. 13, 1908.
- BACCALONI, Salvatore (basso); b. Rome, It., Apr. 14, 1900.
- BAMPTON, Rose (contralto); b. Cleveland, Ohio, Nov. 28, 1909.
- BARBER, Samuel (composer); b. West Chester, Pa., Mar. 9, 1910.
- BARBIROLLI, John (conductor); b. London, Eng., Dec. 2, 1899.
- BARER, Simon (pianist); b. Odessa, Rus., 1896.
- BARLOW, Howard (conductor); b. Plain City, Ohio, May 1, 1892.
- BAUER, Harold (pianist); b. New Malden, Mass., Apr. 28, 1873.
- BAX, Sir Arnold (composer); b. London, Eng., Nov. 8, 1883.
- BEECHAM, Sir Thomas (conductor); b. St. Helena, Eng., Apr. 29, 1879.
- BENNETT, Robert Russell (composer); b. Kansas City, Mo., June 15, 1894.
- BERNSTEIN, Leonard (composer, conductor); b. Lawrence, Mass., Aug. 25, 1918.
- BIGGS, E. Power (organist); b. Westcliff, Eng., Mar. 29, 1906.
- BJOERLING, Jussi (tenor); b. Stora Tuna Dalarna, Swed., Feb. 2, 1911.
- BLITZSTEIN, Marc (composer); b. Philadelphia, Pa., Mar. 2, 1905.
- BLACK, Frank (conductor); b. Philadelphia, Pa., Nov. 28, 1894.
- BLOCH, Ernest (composer); b. Geneva, Switz., July 24, 1880.
- BONELLI, Richard (Richard Bunn) (baritone); b. Port Byron, N. Y.
- BORI, Lucrezia (soprano); b. Valencia, Sp., Dec. 24, 1887.
- BRAILOWSKY, Alexander (pianist); b. Klev, Rus., Feb. 16, 1896.
- BRANZELL, Karin (contralto); b. Stockholm, Swed., Sept. 24, 1891.

- RICE, Carol (contralto); b. Indianapolis, Ind., Apr. 16, 1918.
- RITTEN, Benjamin (composer); b. Lowestoft, Eng., Nov. 22, 1913.
- ROWNLEE, John (baritone); b. Geelong, Austr., Jan. 7, 1901.
- SCH, Adolf (composer, violinist); b. Siegen, Westphalia, Aug. 8, 1891.
- SCH, Fritz (conductor); b. Siegen, Westphalia, Mar. 13, 1890.
- SARPENTER, John Alden (composer); b. Park Ridge, Ill., Feb. 28, 1876.
- SADESUS, Robert (pianist); b. Paris, Fr., Apr. 7, 1899.
- SALS, Pablo (cellist); b. Vendrell, Sp., Dec. 29, 1876.
- SELLA, Alfredo (composer, pianist); b. Turin, It., July 25, 1883.
- ASTAGNA, Bruna (contralto); b. Milan, It., Oct. 15, 1908.
- ASTON, Saul (conductor); b. New York City, Aug. 22, 1901.
- HARPENTIER, Gustave (composer); b. Dieuze, Fr., June 25, 1860.
- HAVEZ, Carlos (composer); b. Mexico, June 13, 1899.
- OATES, Albert (conductor); b. St. Petersburg, Rus., Apr. 23, 1882.
- OATES, Eric (composer); b. Hucknall, Eng., Aug. 27, 1886.
- OPLAND, Aaron (composer); b. Brooklyn, N. Y., Nov. 14, 1900.
- ORTOT, Alfred (pianist); b. Nyon, Fr., Sept. 26, 1877.
- OURBOIN, Charles M. (organist); b. Antwerp, Belg., 1886.
- ROOKS, Richard (tenor); b. Trenton, N. J., June 26, 1900.
- AMROSCH, Walter (conductor); b. Breslau, Prus., Jan. 30, 1862.
- EFAUW, Désiré (conductor); b. Ghent, Belg., Sept. 5, 1885.
- E LUCA, Giuseppe (baritone); b. Rome, It., Dec. 25, 1876.
- AMOND, David (composer); b. Rochester, N. Y., July 9, 1915.
- OHNÁNYI, Ernst von (composer, pianist); b. Pressburg, Slovakia, July 27, 1877.
- ORATI, Antal (conductor); b. Budapest, Hung., Apr. 9, 1906.
- ORFMANN, Anla (pianist); b. Odessa, Rus.
- AMES, Emma (soprano); b. Shanghai, China, Aug. 13, 1865.
- ISLER, Hanns (composer); b. Leipzig, Ger., July 6, 1898.
- MAN, Misha (violinist); b. Stalnoje, Rus., Jan. 20, 1891.
- NESCO, Georges (composer, violinist); b. Dorohol, Rum., Aug. 19, 1881.
- FARRAR, Geraldine (soprano); b. Melrose, Mass., Feb. 28, 1882.
- FIEDLER, Arthur (conductor); b. Boston, Mass., Dec. 17, 1894.
- FISCHER, Edwin (pianist); b. Basel, Switz., Oct. 6, 1886.
- FLAGSTAD, Kirsten (soprano); b. Hamar, Nor., July 12, 1895.
- FOX, Virgil (organist); b. nr. Princeton, Ill., May 3, 1912.
- FRANCESCATTI, Zino (violinist); b. Marseilles, Fr., Aug. 9, 1905.
- FRECCIA, Massimo (conductor); b. Florence, It., Sept. 19, 1922.
- FURTWÄNGLER, Wilhelm (conductor); b. Berlin, Ger., Jan. 25, 1886.
- GALLI-CURCI, Amelita (soprano); b. Milan, It., Nov. 18, 1889.
- GANZ, Rudolph (conductor, pianist); b. Zürich, Switz., Feb. 24, 1877.
- GARBOUSOVA, Raya (cellist); b. Tiflis, Rus., Sept. 25, 1909.
- GARDEN, Mary (soprano); b. Aberdeen, Scot., Feb. 20, 1877.
- GERHARDT, Elena (lieder singer); b. Leipzig, Ger., Nov. 11, 1883.
- GIANNINI, Dusolina (soprano); b. Philadelphia, Pa., Dec. 19, 1904.
- GIESEKING, Walter (pianist); b. Lyon, Fr., Nov. 5, 1895.
- GIGLI, Beniamino (tenor); b. Recanati, It., Mar. 20, 1890.
- GOLDMAN, Edwin F. (composer, conductor); b. Louisville, Ky., Jan. 1, 1878.
- GOLSCHMANN, Vladimir (conductor); b. Paris, Fr., Dec. 16, 1893.
- GOOSSENS, Eugene (conductor); b. London, Eng., May 26, 1893.
- GOOSSENS, Leon (obolst); b. London, Eng., 1896.
- GRAINGER, Percy (pianist); b. Melbourne, Austr., July 8, 1882.
- GRANDJANY, Marcel (harplst); b. Paris, Fr., Sept. 3, 1891.
- GROFE, Ferde (composer); b. New York City, Mar. 27, 1892.
- GRUENBERG, Louis (composer); b. Russia, Aug. 3, 1884.
- HANSON, Howard (composer, conductor); b. Wahoo, Nebr., Oct. 28, 1896.
- HARRIS, Roy (composer); b. Lincoln Co., Okla., Feb. 12, 1898.
- HARRISON, Guy Fraser (conductor); b. Guildford, Eng., Nov. 6, 1894.
- HAYES, Roland (tenor); b. Curryville, Ga., June 3, 1887.
- HEIFETZ, Jascha (violinist); b. Vilna, Rus., Feb. 2, 1901.
- HESS, Myra (pianist); b. London, Eng., Feb. 25, 1890.

- HINDEMITH, Paul (composer); b. Hanau, Ger., Nov. 16, 1895.
- HOFFMANN, Ernst (conductor); b. Boston, Mass., June 18, 1899.
- HOFMANN, Josef (pianist); b. Cracow, Pol., Jan. 20, 1876.
- HONEGGER, Arthur (composer); b. Le Havre, Fr., Mar. 10, 1892.
- HOROWITZ, Vladimir (pianist); b. Kiev, Rus., Oct. 1, 1904.
- ITURBI, José (pianist, conductor); b. Valencia, Sp., Nov. 28, 1895.
- IVES, Charles (composer); b. Danbury, Conn., Oct. 20, 1874.
- JAGEL, Frederick (tenor); b. Brooklyn, N. Y., June 10, 1897.
- JANSSEN, Herbert (baritone); b. Cologne, Ger.
- JANSSEN, Werner (conductor); b. New York City, June 1, 1900.
- JEPSON, Helen (soprano); b. Titusville, Pa., Nov. 25, 1907.
- JERITZA, Maria (soprano); b. Brünn, Aus., Oct. 6, 1887.
- JOHNSON, Edward (gen. mgr. Met. Opera Co.); b. Guelph, Can., Aug. 22, 1881.
- KAPELL, William (pianist); b. New York City, Sept. 20, 1922.
- KHACHATURIAN, Aram (composer); b. Tiflis, June 6, 1903.
- KIEPURA, Jan (tenor); b. Sosnowiec, Pol., May 16, 1902.
- KINDLER, Hans (conductor); b. Rotterdam, Neth., Jan. 8, 1893.
- KIPNIS, Alexander (basso); b. Ukraine, Feb. 1, 1896.
- KIRKPATRICK, Ralph (harpsichordist); b. Leominster, Mass., June 10, 1911.
- KIRSTEN, Dorothy (soprano); b. Montclair, N. J., July 6, 1919.
- KLEIBER, Erich (conductor); b. Vienna, Aus., Aug. 5, 1890.
- KNIGHT, Felix (tenor); b. Macon, Ga., Nov. 1, 1913.
- KODÁLY, Zoltán (composer); b. Kecskemét, Hung., Dec. 16, 1882.
- KORJUS, Miliza (soprano); b. Warsaw, Pol., Aug. 18, 1909.
- KORNGOLD, Erich (composer); b. Brünn, Aus., May 29, 1897.
- KOSTELANETZ, Andre (conductor); b. St. Petersburg, Rus., Dec. 22, 1901.
- KOUSSEVITZKY, Serge (conductor); b. Tver, Rus., July 26, 1874.
- KREISLER, Fritz (violinist); b. Vienna, Aus., Feb. 2, 1875.
- KŘENEK, Ernst (composer); b. Vienna, Aus., Aug. 23, 1900.
- KRUEGER, Karl (conductor); b. Atchison, Kans., Jan. 19, 1894.
- KULLMAN, Charles (tenor); b. New Haven, Conn., Jan. 13, 1903.
- KURENKO, Maria (soprano); b. Moscow, Rus., 1899.
- KURTZ, Efreim (conductor); b. St. Petersburg, Rus., Nov. 7, 1900.
- LAMBERT, Constant (conductor); b. London, Eng., Aug. 23, 1905.
- LANDOWSKA, Wanda (harpsichordist); b. Warsaw, Pol., July 5, 1877.
- LANGE, Hans (conductor); b. Constantinople, Turk., Feb. 17, 1884.
- LAURI-VOLPI, Giacomo (tenor); b. Rome, It., Dec. 11, 1894.
- LAWRENCE, Marjorie (soprano); b. Deans Marsh, Austr., Feb. 17, 1909.
- LEHAR, Franz (composer); b. Komárom, Hung., Apr. 30, 1870.
- LEHMANN, Lotte (soprano); b. Perleberg, Ger., July 2, 1885.
- LEINSDORF, Erich (conductor); b. Vienna, Aus., Feb. 4, 1912.
- LEVANT, Oscar (pianist); b. Pittsburgh, Pa., Dec. 27, 1906.
- LIST, Emanuel (basso); b. Vienna, Aus., Mar. 22, 1891.
- LIST, Eugene (pianist); b. Calif., 1921.
- MacMILLAN, Sir Ernest (conductor); b. Mimico, Can., Aug. 18, 1893.
- MARTINELLI, Giovanni (tenor); b. Montagnana, It., Oct. 22, 1885.
- MATZENAUER, Margaret (contralto); b. Temesvar, Hung., June 1, 1881.
- MAYNOR, Dorothy (soprano); b. Norfolk, Va., Sept. 3, 1910.
- MELCHIOR, Lauritz (tenor); b. Copenhagen, Den., Mar. 20, 1890.
- MELTON, James (tenor); b. Moultrie, Ga., Jan. 2, 1904.
- MENGELBERG, Willem (conductor); b. Utrecht, Neth., Mar. 28, 1871.
- MENOTTI, Gian-Carlo (composer); b. Cadegliano, It., July 7, 1911.
- MENUHIN, Yehudi (violinist); b. New York City, Apr. 22, 1916.
- MERRILL, Robert (baritone); b. Brooklyn, N. Y., June 4, 1919.
- MERRIMAN, Nan (mezzo-soprano); b. Pittsburgh, Pa., Apr. 28, 1920.
- MILANOV, Zinka (soprano); b. Zagreb, Yugos., May 17, 1908.
- MILHAUD, Darius (composer); b. Aix-en-Provence, Fr., Sept. 4, 1892.
- MILSTEIN, Nathan (violinist); b. Odessa, Rus., Dec. 31, 1904.
- MITROPOULOS, Dimitri (conductor); b. Athens, Gr., Feb. 18, 1896.
- MOISEVITCH, Benno (pianist); b. Odessa, Rus., Feb. 22, 1890.
- MONTEUX, Pierre (conductor); b. Paris, Fr., Apr. 4, 1875.

- ORINI, Erica** (violinist); b. Vienna, Aus., Jan. 5, 1910.
- UENCH, Charles** (conductor); b. Strasbourg, Ger., Sept., 1891.
- UNSEL, Patrice** (soprano); b. Spokane, Wash., May 14, 1925.
- VAËS, Gulomar** (pianist); b. São João da Boa Vista, Braz., Feb. 28, 1895.
- VOTNA, Jarmilla** (soprano); b. Prague, Czech., Sept. 23, 1911.
- RMANDY, Eugene** (conductor); b. Budapest, Hung., Nov. 18, 1899.
- ERCE, Jan** (tenor); b. New York City, 1904.
- ELLETIER, Wilfred** (conductor); b. Montreal, Can., June 30, 1896.
- ERSINGER, Louis** (violinist); b. Rochester, Ill., Feb. 11, 1887.
- ESSL, Yella** (harpsichordist); b. Vienna.
- ETRI, Egon** (pianist); b. Hanover, Ger., Mar. 23, 1881.
- ILIPP, Isidore** (pianist); b. Budapest, Hung., Sept. 2, 1863.
- IATIGORSKY, Gregor** (cellist); b. Ekaterinoslav, Rus., Apr. 17, 1903.
- INZA, Ezio** (basso); b. Rome, May 18, 1892.
- ISTON, Walter** (composer); b. Rockland, Maine, Jan. 20, 1894.
- ONS, Lily** (soprano); b. Cannes, Fr., Apr. 13, 1904.
- ONSELLE, Rosa** (soprano); b. Meriden, Conn., Jan. 22, 1897.
- OULENC, Francis** (composer); b. Paris, Fr., Jan. 7, 1899.
- PRIMROSE, William** (violist); b. Glasgow, Scot., Aug. 23, 1904.
- ROKOFIEFF, Serge** (composer); b. Sontsovska, Rus., Apr. 23, 1891.
- SAISA, Rosa** (soprano); b. Bialystok, Pol., May 30, 1893.
- ALF, Torsten** (tenor); b. Sweden, 1915.
- EINER, Fritz** (conductor); b. Budapest, Hung., Dec. 19, 1888.
- ETHBERG, Elisabeth** (soprano); b. Schwarzenberg, Ger., Dec. 22, 1894.
- OBESON, Paul** (baritone); b. Princeton, N. J., Apr. 9, 1898.
- ODZINSKI, Artur** (conductor); b. Spalato, Dalmatia, Jan. 2, 1892.
- UBINSTEIN, Artur** (pianist); b. Warsaw, Pol., Jan. 28, 1889.
- AIDENBERG, Daniel** (conductor); b. Winnipeg, Can., Oct. 12, 1906.
- ALMOND, Felix** (cellist); b. London, Eng., Nov. 19, 1888.
- ALZEDO, Carlos** (harpist); b. Arachon, Fr., Apr. 6, 1885.
- ANDOR, György** (pianist); b. Budapest, Hung., Sept. 21, 1912.
- SANROMÁ, Jesús María** (pianist); b. Carolina, P. R., Nov. 7, 1902.
- SARGENT, Sir Malcom** (conductor); b. Stamford, Eng., Apr. 29, 1895.
- SAYÃO, Bidú** (soprano); b. Rio de Janeiro, Braz., May 11, 1906.
- SCHIPA, Tito** (tenor); b. Lecce, It., Jan. 2, 1890.
- SCHMITZ, E. Robert** (composer; pianist); b. Paris, Fr., Feb., 1889.
- SCHNABEL, Artur** (pianist); b. Lipnik, Aus., Apr. 17, 1882.
- SCHNEIDER, Alexander** (violinist); b. Vilna, Pol., Dec. 21, 1908.
- SCHÖNBERG, Arnold** (composer); b. Vienna, Aus., Sept. 13, 1874.
- SCHORR, Friedrich** (baritone); b. Nagyvárad, Hung., Sept. 2, 1888.
- SCHUMAN, William** (composer); b. New York City, Aug. 4, 1910.
- SCHUMANN, Elisabeth** (soprano); b. Merseburg, Ger., June 13, 1891.
- SCHWEITZER, Albert** (organist); b. Kaisersburg, Alsace, Jan. 14, 1875.
- SEGOVIA, Andrés** (guitarist); b. Linares, Sp., Feb. 18, 1894.
- SEIDEL, Toscha** (violinist); b. Odessa, Rus., Nov. 17, 1899.
- SERKIN, Rudolf** (pianist); b. Eger, Boh., Mar. 28, 1903.
- SESSIONS, Roger** (composer); b. Brooklyn, N. Y., Dec. 28, 1896.
- SEVITZKY, Fabien** (Fabien Koussevitzky) (conductor); b. Vyshni-Volochek, Rus., Sept. 30, 1893.
- SHAW, Robert** (choral dir.); b. Red Bluff, Calif., Apr. 30, 1916.
- SHOSTAKOVICH, Dmitri** (composer); b. St. Petersburg, Rus., Sept. 26, 1906.
- SIBELIUS, Jean** (composer); b. Tavastehus, Fin., Dec. 8, 1865.
- SINGHER, Martial** (baritone); b. Oloron-St.-Marie, Fr., Aug. 14, 1904.
- SMALLENS, Alexander** (conductor); b. St. Petersburg, Rus., Jan. 1, 1889.
- SOWERBY, Leo** (composer); b. Grand Rapids, Mich., May 1, 1895.
- SPALDING, Albert** (violinist); b. Chicago, Ill., Aug. 15, 1888.
- STEBER, Eleanor** (soprano); b. Wheeling, W. Va., July 17, 1916.
- STEINBERG, William** (conductor); b. Cologne, Ger., Aug. 1, 1899.
- STERN, Isaac** (violinist); b. Kremlniesy, Rus., 1920.
- STEVENS, Risé** (mezzo-soprano); b. New York City, June 11, 1913.
- STEWART, Reginald** (conductor); b. Edinburgh, Scot., Apr. 20, 1900.
- STIEDRY, Fritz** (conductor); b. Vienna, Aus., Oct. 11, 1883.

- STILL, William Grant (composer); b. Woodville, Miss., May 11, 1895.
- STOKOWSKI, Leopold (conductor); b. London, Eng., Apr. 18, 1882.
- STRAUS, Oskar (composer); b. Vienna, Aus., Apr. 6, 1870.
- STRAUSS, Richard (composer); b. Munich, Ger., June 11, 1864.
- STRAVINSKY, Igor (composer); b. Oranienbaum, Rus., June 17, 1882.
- SWARTHOUT, Gladys (mezzo-soprano); b. Deepwater, Mo., Dec. 25, 1904.
- SZELL, George (conductor); b. Budapest, Hung., June 7, 1897.
- SZIGETI, Joseph (violinist); b. Budapest, Hung., Sept. 5, 1892.
- TAGLIAVINI, Ferruccio (tenor); b. Reggio Emilia, It., Aug. 14, 1913.
- TAYLOR, Deems (composer); b. New York City, Dec. 22, 1885.
- TEMPLETON, Alec (pianist); b. Cardiff, Wales, July 4, 1910.
- TEYTE, Maggie (soprano); b. Wolverhampton, Eng., Apr. 17, 1891.
- THOMAS, John Charles (baritone); b. Meyersdale, Pa., Sept. 8, 1891.
- THOMPSON, Randall (composer); b. New York City, Apr. 21, 1899.
- THOMSON, Virgil (composer, critic); b. Kansas City, Mo., Nov. 25, 1896.
- THORBORG, Kerstin (contralto); b. Vengjan, Swed., May 19, 1906.
- TIBBETT, Lawrence (baritone); b. Bakersfield, Calif., Nov. 16, 1896.
- TOCH, Ernst (composer); b. Vienna, Aus., Dec. 7, 1887.
- TOSCANINI, Arturo (conductor); b. Palma, It., Mar. 25, 1867.
- TOUREL, Jennie (mezzo-soprano); b. Montreal, Can., June 22, 1910.
- TRAUBEL, Helen (soprano); b. St. Louis, Mo.
- VAUGHAN WILLIAMS, Ralph (composer); b. Down Ampney, Eng., Oct. 12, 1872.
- VILLA-LOBOS, Heitor (composer); b. Rio de Janeiro, Braz., Mar. 5, 1884.
- VRONSKY, Vitya (pianist); b. Evpatoria, Crimea, Aug. 22, 1909.
- WALLENSTEIN, Alfred (conductor, cellist); b. Chicago, Ill., Oct. 7, 1898.
- WALTER, Bruno (conductor); b. Berlin, Ger., Sept. 15, 1876.
- WALTON, William (composer); b. Oldham, Eng., Mar. 29, 1902.
- WARREN, Leonard (baritone); b. New York City, Apr. 21, 1911.
- WEILL, Kurt (composer); b. Dessau, Ger., Mar. 2, 1900.
- ZIMBALIST, Efrem (violinist); b. Rostov-on-Don, Rus., Apr. 9, 1889.

Entertainment

- ABBOTT, Bud (actor); b. Asbury Park, N. J., Oct. 2, 1898.
- ABBOTT, George (director, playwright); b. Forestville, N. Y., June 25, 1889.
- ABEL, Walter (actor); b. St. Paul, Minn., June 6, 1898.
- ADAMS, Maude (actress); b. Salt Lake City, Utah, Nov. 11, 1872.
- ADLER, Larry (harmonica player); b. Baltimore, Md., Feb. 10, 1914.
- ADLER, Luther (actor); b. New York City, May 4, 1903.
- AHERNE, Brian (actor); b. Kings Norton, Eng., May 2, 1902.
- ALBERT, Eddie (Eddie A. Helmberher) (actor); b. Rock Island, Ill., Apr. 22, 1908.
- ALDA, Robert (Alphonso D'Abruzzo) (actor); b. New York City, Feb. 26, 1914.
- ALLEN, Fred (John F. Sullivan) (actor); b. Cambridge, Mass., May 31, 1894.
- ALLEN, Gracie (actress); b. San Francisco.
- ALLGOOD, Sara (actress); b. Dublin, Ire., Oct. 31, 1883.
- ALLYSON, June (actress); b. Westchester Co., N. Y.
- AMECHE, Don (actor); b. Kenosha, Wis., May 31, 1908.
- AMOS (Freeman F. Gosden) (actor); b. Richmond, Va., May 5, 1899.
- ANDERSON, Eddie. *See* Rochester.
- ANDERSON, Judith (actress); b. Adelaide, Austr., Feb. 10, 1898.
- ANDREWS, Dana (actor); b. Collins, Miss., Jan. 1, 1912.
- ANDREWS, Laverne (singer); b. Minneapolis, Minn., July 6, 1915.
- ANDREWS, Maxene (singer); b. Minneapolis, Minn., Jan. 3, 1918.
- ANDREWS, Patricia (singer); b. Minneapolis, Minn., Feb. 16, 1920.
- ANDY (Charles J. Correll) (actor); b. Peoria, Ill., Feb. 2, 1890.
- ARLEN, Harold (Hyman Arluck) (composer); b. Buffalo, N. Y., Feb. 15, 1905.
- ARMSTRONG, Louis (trumpeter); b. New Orleans, La., July 4, 1900.
- ARNOLD, Edward (actor); b. New York City, Feb. 18, 1890.
- ARTHUR, Jean (actress); b. New York City, Oct. 17, 1908.
- ASTAIRE, Fred (Frederick Austerlitz) (dancer); b. Omaha, Nebr., May 10, 1899.
- ASTOR, Mary (Lucille Langhanke) (actress); b. Quincy, Ill., May 3, 1906.

- BER, Mischa (actor); b. St. Petersburg, Rus., Nov. 17, 1905.
- BUTRY, Gene (actor); b. Tloga, Tex., Sept. 29, 1907.
- CYRES, Lew (actor); b. Minneapolis, Minn., Dec. 28, 1908.
- ACALL, Lauren (actress); b. New York City, Sept. 16, 1924.
- CAINTER, Fay (actress); b. Los Angeles, Calif., 1893.
- AKER, Kenny (actor, singer); b. Monrovia, Calif., Sept. 30, 1912.
- AKER, Phil (actor); b. Philadelphia, Pa., Aug. 24, 1898.
- ALANCHINE, George (ballet director); b. St. Petersburg, Rus., Jan. 9, 1904.
- ALL, Lucille (actress); b. Butte, Mont., Aug. 6, 1911.
- ANKHEAD, Tallulah (actress); b. Huntsville, Ala., Jan. 31, 1903.
- ANKS, Leslie (actor); b. Liverpool, Eng., June 9, 1890.
- ARI, Lynn (Marjorie Bitzer) (actress); b. Roanoke, Va.
- ARNES, Binnie (actress); b. London, Eng., Mar. 25, 1908.
- ARRAT, Robert (actor); b. New York City, July 10, 1891.
- ARRIE, Wendy (actress); b. Hong Kong, 1913.
- ARRYMORE, Diana (actress); b. New York City, Mar. 3, 1921.
- ARRYMORE, Ethel (actress); b. Philadelphia, Pa., Aug. 15, 1879.
- ARRYMORE, Lionel (Lionel Blythe) (actor); b. Philadelphia, Pa., Apr. 28, 1878.
- ARTHELMLESS, Richard (actor); b. New York City, May 9, 1897.
- ARTHOLOMEW, Freddie (actor); b. London, Eng., Mar. 28, 1924.
- ARTON, James (actor); b. Gloucester, N. J., Nov. 1, 1890.
- ASIE, William "Count" (band leader); b. Red Bank, N. J., Aug. 21, 1906.
- AXTER, Anne (actress); b. Michigan City, Ind., May 7, 1923.
- AXTER, Warner (actor); b. Columbus, Ohio, Mar. 29, 1893.
- ERY, Wallace (actor); b. Kansas City, Mo., Apr. 1, 1889.
- ELAMY, Ralph (actor); b. Chicago, Ill., June 17, 1905.
- ENDIX, William (actor); b. New York City, Jan. 14, 1906.
- ENNETT, Constance (actress); b. New York City, Oct. 22, 1905.
- ENNETT, Joan (actress); b. Palsades, N. J., Feb. 27, 1910.
- ENNETT, Richard Dyer (folksinger); b. England, Oct. 6, 1913.
- ENNY, Jack (actor); b. Waukegan, Ill., Feb. 14, 1894.
- BERGEN, Edgar (actor, ventriloquist); b. Chicago, Ill., Feb. 16, 1903.
- BERGMAN, Ingrid (actress); b. Stockholm, Swed., 1917.
- BERGNER, Elisabeth (actress); b. Vienna, Aus., Aug. 22, 1900.
- BERLE, Milton (Milton Berlinger) (actor); b. New York City, July 12, 1908.
- BERLIN, Irving (Isidore Baline) (song writer); b. Russia, May 11, 1888.
- BEY, Turhan (actor); b. Vienna, Aus., Mar. 30, ??.
- BICKFORD, Charles (actor); b. Cambridge, Mass.
- BLAIR, Janet (actress); b. Blair, Pa.
- BLONDELL, Joan (actress); b. New York City, Aug. 30, 1909.
- BOGART, Humphrey (actor); b. New York City, Dec. 25, 1900.
- BOLGER, Raymond (actor); b. Dorchester, Mass., Jan. 10, 1906.
- BONDI, Beulah (actress); b. Chicago, Ill., May 3, 1892.
- BORZAGE, Frank (director); b. Salt Lake City, Utah, Apr. 23, 1893.
- BOYD, William (actor); b. Cambridge, Ohio, June 5, 1898.
- BOYER, Charles (actor); b. Figeac, Fr., Aug. 28, 1899.
- BOYER, Lucienne (singer); b. France.
- BRACKEN, Eddie (actor); b. Astoria, N. Y., Feb. 7, 1920.
- BRADY, William A. (theatrical manager); b. San Francisco, Calif., June 19, 1863.
- BREMER, Lucille (actress); b. Amsterdam, N. Y.
- BRENNAN, Walter (actor); b. Lynn, Mass., July 25, 1894.
- BRENT, George (actor); b. Dublin, Ire., Mar. 15, 1904.
- BRENT, Romney (Romulo Larralde) (actor); b. Sattilo, Mex., Jan. 26, 1902.
- BRICE, Fanny (Fanny Borach) (actress); b. New York City, Oct. 29, 1891.
- BROWN, Joe E. (actor); b. Holgate, Ohio, July 28, 1892.
- BRUCE, Carol (singer); b. Great Neck, N. Y., Nov. 15, 1919.
- BRUCE, Nigel (actor); b. San Diego, Calif., Feb. 4, 1895.
- BRUCE, Virginia (actress); b. Minneapolis, Minn., Sept. 29, 1910.
- BURKE, Billie (actress); b. Washington, D. C., Aug. 7, 1886.
- BURNS, Bob (actor); b. Van Buren, Ark., Oct. 2, 1896.
- CAGNEY, James (actor); b. New York City, July 17, 1904.
- CALHERN, Louis (actor); b. New York City, 1895.

- CALLOWAY, Cab (band leader); b. Rochester, N. Y., Dec. 26, 1907.
- CANOVA, Judy (actress); b. Jacksonville, Fla., Nov. 20, 1916.
- CANTOR, Eddie (Edward Iskowitz) (actor); b. New York City, Jan. 31, 1892.
- CAPRA, Frank (director); b. Palermo, Sicily, May 18, 1897.
- CARLE, Frankie (pianist); b. Providence, R. I.
- CARMICHAEL, Hoagy (song writer); b. Bloomington, Ind., Nov. 22, 1899.
- CARROLL, Madeleine (actress); b. Bromwich, Eng., Feb. 26, 1909.
- CARSON, Jack (actor); b. Carman, Can., Oct. 27, 1910.
- CAVALLERO, Carmen (band leader); b. New York City, May 6, 1913.
- CHAPLIN, Charles (actor); b. London, Eng., Apr. 16, 1889.
- CHASE, Ilka (actress); b. New York City, Apr. 8, 1905.
- CHEVALIER, Maurice (actor); b. Paris, Fr., Sept. 12, 1888.
- CHRISTIANS, Mady (actress); b. Vienna, Aus., Jan. 19, 1900.
- CLAIRE, Ina (Ina Fagan) (actress); b. Washington, D. C., Oct. 15, 1892.
- CLARK, Bobby (actor); b. Springfield, Ohio, June 16, 1888.
- CLARK, Dane (actor); b. New York City, Feb. 18, 1913.
- COBURN, Charles (actor); b. Savannah, Ga., June 19, 1877.
- COLBERT, Claudette (Lily Chauchoin) (actress); b. Paris, Fr., Sept. 13, 1905.
- COLLINGE, Patricia (actress); b. Dublin, Ire., Sept. 20, 1894.
- COLMAN, Ronald (actor); b. Richmond, Eng., Feb. 9, 1891.
- COLONNA, Jerry (comedian); b. Boston, Mass., Mar. 25, 1903.
- CONTE, Richard (actor); b. New York City, Mar. 24, 1914.
- COOGAN, Jackie (actor); b. Los Angeles, Calif., Oct. 26, 1914.
- COOPER, Gary (actor); b. Helena, Mont., May 7, 1901.
- COOPER, Jackie (actor); b. Los Angeles, Calif., Sept. 15, 1922.
- CORBETT, Leonora (actress); b. London, Eng., June 28, 1908.
- CORNELL, Katharine (actress); b. Berlin, Ger., Feb. 16, 1898.
- CORRELL, Charles J. *See* Andy.
- COSTELLO, Lou (Louis Cristillo) (actor); b. Paterson, N. J., Mar. 6, 1908.
- COTTEN, Joseph (actor); b. Petersburg, Va., 1905.
- COWL, Jane (Jane Cowles) (actress); b. Boston, Mass., Dec. 14, 1884.
- CRAIG, James (James Meador) (actor); b. Nashville, Tenn., Feb. 4, 1912.
- CRAIN, Jeanne (actress); b. Barstow, Calif., May 25, 1925.
- CRAWFORD, Joan (Lucille LeSueur) (actress); b. San Antonio, Tex., Mar. 23, 1908.
- CROSBY, Bing (actor, singer); b. Tacoma, Wash., May 2, 1904.
- CROSS, Milton (announcer); b. New York City, Apr. 16, 1897.
- CUGAT, Xavier (orch. ldr.); b. Barcelona, Sp., Jan. 1, 1900.
- CUMMINGS, Constance (actress); b. Seattle, Wash., May 15, 1910.
- CUMMINGS, Robert (actor); b. Joplin, Mo., June 9, 1910.
- CURTIZ, Michael (director); b. Budapest, Hung., Dec. 24, 1888.
- DARNELL, Linda (actress); b. Dallas, Tex.
- DARRIEUX, Danielle (actress); b. Bordeaux, Fr., May 1, 1917.
- DAVIS, Bette (actress); b. Lowell, Mass., Apr. 5, 1908.
- DAVIS, Joan (actress); b. St. Paul, Minn.
- DAY, Dennis (singer); b. New York City, May 21, 1917.
- DAY, Laraine (Loraine Johnson) (actress); b. Roosevelt, Utah, Oct. 13, 1920.
- DeHAVILLAND, Olivia (actress); b. Tokyo, Jap., July 1, 1916.
- DEL RIO, Dolores (Dolores Ansunsolo) (actress); b. Durango, Mex., Aug. 3, 1905.
- de MILLE, Agnes (choreographer); b. New York City.
- de MILLE, Cecil B. (director); b. Ashfield, Mass., Aug. 12, 1881.
- DeSYLVA, Buddy (producer, song writer); b. New York City, Jan. 27, 1896.
- DIETRICH, Marlene (Mary Von Losch) (actress); b. Berlin, Ger., Dec. 27, 1904.
- DISNEY, Walt (animated cartoonist); b. Chicago, Ill., Dec. 5, 1901.
- DONAT, Robert (actor); b. Withington, Eng., Mar. 18, 1905.
- DONLEVY, Brian (actor); b. Portadown, Ire., Feb. 9, 1903.
- DORSEY, Tommy (band leader); b. Mahanoy Plane, Pa., Nov. 19, 1905.
- DOUGLAS, Melvyn (actor); b. Macon, Ga., Apr. 5, 1901.
- DOUGLAS, Paul (actor); b. Philadelphia, Pa., Apr. 11, 1907.
- DOWLING, Eddie (actor, director); b. Woonsocket, R. I., Dec. 9, 1894.
- DOWNNEY, Morton (singer); b. Wallingford, Conn., Nov. 14, 1902.
- DRAKE, Alfred (singer, actor); b. New York City, Oct. 7, 1914.
- DRAPER, Paul (dancer); b. Florence, It., Oct. 25, 1911.

- RAPER, Ruth (actress); b. New York City, Dec. 2, 1884.
- UCHIN, Eddie (band leader, pianist); b. Cambridge, Mass., Apr. 1, 1909.
- UNN, James (actor); b. New York City, Nov. 2, 1905.
- UNNE, Irene (actress); b. Louisville, Ky., Dec. 20, 1904.
- URANTE, Jimmy (actor); b. New York City, Feb. 10, 1893.
- URBIN, Deanna (actress); b. Winnipeg, Can., Dec. 4, 1922.
- URYEA, Dan (actor); b. White Plains, N. Y., Jan. 23, 1907.
- ODY, Nelson (actor, singer); b. Providence, R. I., June 29, 1901.
- OWARDS, Joan (actress); b. New York City, July 15, 1920.
- LINGTON, Duke (band leader); b. Washington, D. C., Apr. 29, 1899.
- LIOT, Bill (actor); b. Pattonsburg, Mo.
- MERSON, Faye (actress); b. Elizabeth, La., July 8, 1917.
- MANS, Maurice (actor); b. Dorchester, Eng., June 3, 1901.
- AIRBANKS, Douglas, Jr. (actor); b. New York City, Dec. 9, 1909.
- ALKENBURG, Jinx (Eugenia) (actress); b. Barcelona, Sp., Jan. 21, 1919.
- AY, Frank (actor); b. San Francisco, Calif., Nov. 17, 1897.
- AYE, Alice (actress); b. New York City, May 5, 1915.
- ERRER, Jose (actor); b. Puerto Rico, 1909.
- ELD, Betty (actress); b. Boston, Mass., Feb. 8, 1918.
- ELDS, Gracie (actress); b. Rochdale, Eng., Jan. 9, 1898.
- TZGERALD, Barry (William J. Shields) (actor); b. Dublin, Ire., Mar. 1888.
- TZGERALD, Ella (singer); b. Newport News, Va., Apr. 25, 1918.
- TZGERALD, Geraldine (actress); b. Dublin, Ire., Nov. 24, 1914.
- LYNN, Errol (actor); b. Hobart, Tasmania, June 20, 1909.
- ONDA, Henry (actor); b. Grand Island, Nebr., May 16, 1905.
- ONTAINE, Joan (actress); b. Tokyo, Jap., Oct. 22, 1917.
- ONTANNE, Lynn (actress); b. London, Eng., 1887.
- OSTER, Preston (actor); b. Ocean City, N. J., Aug. 24, 1902.
- OY, Eddie, Jr., (actor, dancer); b. New Rochelle, N. Y., Feb. 4, 1905.
- PANCIS, Kay (Katherine Gibbs) (actress); b. Oklahoma City, Okla., Jan. 13, 1905.
- FRIML, Rudolf (operetta composer); b. Prague, Czech., Dec. 7, 1884.
- FROMAN, Jane (singer); b. St. Louis, Mo., Nov. 10, 1911.
- GABIN, Jean (actor); b. Paris, Fr., May 17, 1904.
- GABLE, Clark (actor); b. Cadiz, Ohio, Feb. 1, 1901.
- GARBO, Greta (Greta Gustafsson) (actress); b. Stockholm, Swed., Sept. 18, 1905.
- GARDINER, Reginald (actor); b. Wimbledon, Eng., Feb. 27, 1903.
- GARDNER, Ed (actor); b. Astoria, N. Y., June, 1904.
- GARFIELD, John (actor); b. New York City, Mar. 4, 1913.
- GARLAND, Judy (actress); b. Grand Rapids, Minn., June 10, 1922.
- GARSON, Greer (actress); b. County Down, Ire.
- GAXTON, William (Arturo Caxiola) (actor); b. San Francisco, Calif., Dec. 2, 1893.
- GEORGE, Gladys (Gladys Clare) (actress); b. Patton, Maine, Sept. 13, 1904.
- GIELGUD, John (actor); b. London, Eng., Apr. 14, 1904.
- GISH, Dorothy (actress); b. Massillon, Ohio, Mar. 11, 1898.
- GISH, Lillian (actress); b. Springfield, Ohio, Oct. 14, 1896.
- GLEASON, James (actor); b. New York City, May 23, 1886.
- GODDARD, Paulette (actress); b. Great Neck, N. Y., June 3, 1911.
- GODFREY, Arthur (radio broadcaster); b. New York City, Aug. 31, 1903.
- GOLDEN, John (producer); b. New York City, June 27, 1874.
- GOLDWYN, Samuel (Samuel Goldfish) (producer); b. Warsaw, Pol., 1882.
- GOODMAN, Benny (band leader); b. Chicago, Ill., May 30, 1909.
- GORDON, Max (producer); b. New York City, 1892.
- GORDON, Ruth (actress); b. Wollaston, Mass., Oct. 30, 1896.
- GOSDEN, Freeman F. *See* Amos.
- GOULD, Morton (composer); b. Richmond Hill, N. Y., Dec. 10, 1913.
- GRABLE, Betty (actress); b. St. Louis, Mo., Dec. 18, 1916.
- GRAHAM, Martha (choreographer); b. Pittsburgh, Pa.
- GRANGER, Stewart (James Stewart) (actor); b. May 6, 1913.
- GRANT, Cary (Archibald A. Leach) (actor); b. Bristol, Eng., Jan. 18, 1904.
- GRAYSON, Kathryn (Zelma Hedrick) (actress); b. Winston-Salem, N. C.

- GREENSTREET, Sydney (actor); b. Sandwich, Eng., Dec. 27, 1879.
- GWENN, Edmund (actor); b. London, Eng., Sept. 26, 1877.
- HALEY, Jack (actor); b. Boston, Mass., Aug. 10, 1902.
- HAMMERSTEIN, Oscar, II (librettist); b. New York City, July 12, 1895.
- HAMPDEN, Walter (Walter H. Dougherty) (actor); b. Brooklyn, N. Y., June 30, 1879.
- HARDWICKE, Sir Cedric (actor); b. Lye, Eng., Feb. 19, 1893.
- HARRIS, Phil (band leader); b. Linton, Ind., June 24, 1906.
- HARRISON, Rex (actor); b. Huyton, Eng., Mar. 5, 1908.
- HASSO, Signe (Signe Larsson) (actress); b. Stockholm, Swed.
- HAYES, Helen (actress); b. Washington, D. C., Oct. 10, 1900.
- HAYMES, Dick (singer); b. Tarrytown, N. Y.
- HAYWARD, Susan (Edythe Marrener) (actress); b. Brooklyn, N. Y., Jan. 30, 1918.
- HAYWORTH, Rita (Margarita Cansino) (actress); b. N. Y. C., Oct. 17, 1918.
- HEFLIN, Van (actor); b. Walters, Okla., Dec. 13, 1910.
- HENIE, Sonja (actress, skater); b. Oslo, Nor., Apr. 8, 1913.
- HENREID, Paul (actor); b. Trieste, It., Jan. 10, 1908.
- HEPBURN, Katharine (actress); b. Hartford, Conn., 1909.
- HERMAN, Woody (band ldr.); b. Milwaukee, Wis., May 16, 1913.
- HERSHOLT, Jean (actor); b. Copenhagen, Den., July 12, 1886.
- HILDEGARDE (Hildegard Loretta Sell) (entertainer); b. Adell, Wis., Feb. 1, 1906.
- HILLER, Wendy (actress); b. Branham, Eng., Aug. 15, 1912.
- HITCHCOCK, Alfred J. (director); b. England, Aug. 13, 1899.
- HOLDEN, William (actor); b. O'Fallon, Ill., Apr. 17, 1918.
- HOLLIDAY, Billie (singer); b. Baltimore, Md., 1919(?).
- HOLLIDAY, Judy (actress); b. New York City, June 21, 1923.
- HOLM, Celeste (actress, singer); b. New York City, Apr. 29, 1919.
- HOLT, Jack (actor); b. Winchester, Va., May 31, 1888.
- HOLT, Tim (actor); b. Beverly Hills, Calif., Feb. 5, 1918.
- HOMOLKA, Oscar (actor); b. Vienna, Aus., 1901.
- HOPE, Bob (actor); b. London, Eng., May 29, 1903.
- HOPKINS, Miriam (actress); b. Bainbridge, Ga., Oct. 18, 1902.
- HORNE, Lena (actress, singer); b. Brooklyn, N. Y., 1918.
- HORTON, Edward Everett (actor); b. Brooklyn, N. Y., Mar. 18, 1887.
- HOWARD, Trevor (actor); b. Kent, Eng., Sept. 29, 1916.
- HOWARD, Willie (comedian); b. New York City, 1883.
- HULL, Henry (actor); b. Louisville, Ky., Oct. 3, 1890.
- HULL, Josephine (actress); b. Newtonville, Mass., Jan. 3, 1886.
- HUNT, Marsha (actress); b. Chicago, Ill., Oct. 17, 1917.
- HUSSEY, Ruth (actress); b. Providence, R. I.
- HUSTON, Walter (actor); b. Toronto, Can., Apr. 6, 1884.
- HUTTON, Betty (actress, singer); b. Battle Creek, Mich., Feb. 26, 1921.
- IVES, Burl (folksinger); b. Hunt, Ill., June 14, 1909.
- JAFFE, Sam (actor); b. New York City, Mar. 8, 1898.
- JAMES, Harry (band leader); b. Albany, Ga., Mar. 16, 1916.
- JANIS, Elsie (actress); b. Columbus, Ohio, Mar. 16, 1889.
- JESSEL, George (actor); b. New York City, Apr. 3, 1898.
- JOHNSON, Celia (actress); b. Richmond, Eng., Dec. 18, 1908.
- JOHNSON, Harold "Chick" (actor); b. Chicago, Ill., Mar. 5, 1895.
- JOHNSON, Van (actor); b. Newport, R. I., Aug. 20, 1916.
- JOLSON, Al (Asa Yoelson) (singer); b. St. Petersburg, Rus., May 26, 1886.
- JONES, Jennifer (Phyllis Isley) (actress); b. Tulsa, Okla., Mar. 2, 1919.
- JORDAN, James. *See* McGee.
- JORDAN, Marian. *See* McGee.
- JORY, Victor (actor); b. Dawson, Can., Nov. 23, 1902.
- JOURDAN, Louis (actor); b. Marseilles, Fr., June 18, 1921.
- KARLOFF, Boris (Charles E. Pratt) (actor); b. Dulwich, Eng., Nov. 23, 1887.
- KAYE, Danny (actor); b. Brooklyn, N. Y., Jan. 18, 1913.
- KAZAN, Elia (director); b. Istanbul, Turk., Sept. 7, 1909.
- KELLY, Gene (actor); b. Pittsburgh, Pa., Aug. 23, 1912.
- KELLY, Paul (actor); b. Brooklyn, N. Y., Aug. 8, 1899.
- KERR, Deborah (actress); b. Helensburgh, Scot., Sept. 30, 1921.

- NG, Dennis (actor); b. Coventry, Eng., Nov. 2, 1897.
- NG, Henry (director); b. Christianburg, Va., Jan. 24, 1896.
- NOX, Alexander (actor); b. Strathroy, Can., Jan. 16, 1907.
- ORDA, Sir Alexander (producer); b. Turkeve, Hung., Sept. 16, 1893.
- RUGER, Otto (actor); b. Toledo, Ohio, Sept. 6, 1885.
- RUPA, Gene (band ldr.); b. Chicago, Ill., Jan. 15, 1909.
- YSER, Kay (band leader); b. Rocky Mount, N. C., June 18, 1905.
- ADD, Alan (actor); b. Hot Springs, Ark., Sept. 3, 1913.
- AHR, Bert (Irving Lashrheim) (actor); b. New York City, Aug. 13, 1895.
- AKE, Veronica (Constance Keane) (actress); b. Lake Placid, N. Y., Nov. 14, 1919.
- AMARR, Hedy (actress); b. Vienna, Aus.
- AMOUR, Dorothy (actress); b. New Orleans, La., Dec. 10, 1914.
- ANCASTER, Burt (actor); b. New York City, Nov. 2, 1913.
- ANCHESTER, Elsa (actress); b. London, Oct. 28, 1902.
- ANDIS, Jessie Royce (actress); b. Chicago, Ill., Nov. 25, 1904.
- ANG, Fritz (director); b. Vienna, Aus., Dec. 5, 1890.
- ANGFORD, Frances (singer); b. Lakeland, Fla., Apr. 4, 1913.
- AUGHTON, Charles (actor); b. Scarborough, Eng., July 1, 1899.
- AWFORD, Peter (actor); b. London, Eng., Sept. 7, 1923.
- AWRENCE, Gertrude (actress); b. London, Eng., July 4, 1900.
- EE, Canada (actor); b. New York City, Mar. 2, 1907.
- EE, Gypsy Rose (Rose Hovic) (actress); b. Seattle, Wash., Feb. 9, 1914.
- GALLIENNE, Eva (actress, director), b. London, Eng., Jan. 11, 1899.
- GIGH, Vivien (Vivian Hartley) (actress); b. Darjeeling, India, Nov. 5, 1913.
- ROY, Mervyn (producer, director); b. San Francisco, Calif., Oct. 15, 1900.
- SLIE, Joan (Joan Brodell) (actress); b. Detroit, Mich., Jan. 26, 1925.
- SVENE, Sam (actor); b. New York City, 1907.
- WIS, Joe E. (comedian); b. New York City.
- LLIE, Beatrice (actress); b. Toronto, Can., May 29, 1898.
- VESY, Roger (actor); b. Barry, Wales, June 25, 1906.
- OYD, Harold (actor); b. Burchard, Nebr., Apr. 20, 1894.
- LOCKHART, Gene (actor); b. London, Can., July 25, 1892.
- LOCKHART, June (actress); b. New York City, June 25, 1925.
- LOCKWOOD, Margaret (actress); b. Karachi, India, 1916.
- LOMBARDO, Guy (band leader); b. London, Can., June 19, 1902.
- LOPEZ, Vincent (band leader); b. Brooklyn, N. Y., Dec. 10, 1898.
- LORRE, Peter (actor); b. Rosenberg, Hung., June 26, 1904.
- LOUISE, Anita (Anita Fremault) (actress); b. New York City, 1915.
- LOY, Myrna (Myrna Williams) (actress); b. Helena, Mont., Aug. 2, 1905.
- LUGOSI, Bela (Bela Lugosi Blasko) (actor); b. Lugos, Hung., Oct. 20, 1888.
- LUKAS, Paul (actor); b. Budapest, Hung., May 26, 1895.
- LUNT, Alfred (actor); b. Milwaukee, Wis., 1893.
- LUPINO, Ida (actress); b. London, Eng., Feb. 4, 1918.
- LYNN, Diana (Dolly Loehr) (actress); b. Los Angeles, Calif., Oct. 7, 1926.
- LYTELL, Bert (actor, director); b. New York City, 1885.
- McCAREY, Leo (director); b. Los Angeles, Calif., Oct. 3, 1898.
- McCREA, Joel (actor); b. Los Angeles, Calif., Nov. 5, 1906.
- MacDONALD, Jeanette (actress, soprano); b. Philadelphia, Pa., June 18, 1907.
- McDOWALL, Roddy (actor); b. London, Eng., Sept. 17, 1928.
- McGEE, Fibber (James Jordan) (actor); b. Peoria, Ill., Nov. 16, 1896.
- McGEE, Molly (Marian Jordan) (actress); b. Peoria, Ill., Apr. 15, 1898.
- McGUIRE, Dorothy (actress); b. Omaha, Nebr., June 14, 1919.
- McLAGLEN, Victor (actor); b. Tumbridge Wells, Eng., Dec. 11, 1886.
- MacMURRAY, Fred (actor); b. Kankakee, Ill., Aug. 30, 1908.
- MARCH, Fredric (Frederick Bickel) (actor); b. Racine, Wis., Aug. 31, 1897.
- MARGO (Maria Boldao y Castilla) (actress); b. Mexico City, May 10, 1918.
- MARKOVA, Alicia (dancer); b. London, Eng., Dec. 1, 1910.
- MARSHALL, Herbert (actor); b. London, Eng., May 23, 1890.
- MARTIN, Mary (actress); b. Weatherford, Tex., Dec. 1, 1914.
- MARTIN, Tony (actor, singer); b. San Francisco, Calif., Dec. 25, 1914.
- MARX, Chico (Leonard Marx) (actor); b. New York City, Mar. 22, 1891.
- MARX, Groucho (Julius Marx) (actor); b. New York City, Oct. 2, 1895.

- MARX, Harpo (Arthur Marx) (actor); b. New York City, Nov. 23, 1893.
- MASON, James (actor); b. Huddersfield, Eng., May 15, 1909.
- MASSEY, Iiona (Iona Hajmassy) (actress); b. Hungary, 1910.
- MASSEY, Raymond (actor); b. Toronto, Can., Aug. 30, 1896.
- MASSINE, Léonide (choreographer); b. Moscow, Rus., Aug. 9, 1896.
- MATURE, Victor (actor); b. Louisville, Ky., Jan. 29, 1916.
- MAYER, Louis B. (producer); b. Minsk, Rus., July 4, 1885.
- MAYO, Virginia (Virginia Jones) (actress); b. St. Louis, Mo., Nov. 30, 1920.
- MENJOU, Adolphe (actor); b. Pittsburgh, Pa., Feb. 18, 1890.
- MEREDITH, Burgess (actor); b. Cleveland, Ohio, Nov. 16, 1908.
- MERMAN, Ethel (Ethel Zimmerman) (actress, singer); b. Astoria, N. Y., Jan. 16, 1909.
- MILLAND, Ray (actor); b. Neath, Wales, Jan. 3, 1907.
- MILLS, John (actor); b. Suffolk, Eng., Feb. 22, 1908.
- MIRANDA, Carmen (Maria do Carmo Miranda da Cunha) (actress, singer); b. Marco Canavezes, Port., 1915.
- MITCHELL, Thomas (actor); b. Elizabeth, N. J., July 11, 1895.
- MITCHUM, Robert (actor); b. Rising Sun, Del.
- MONTGOMERY, Robert (actor); b. Beacon, N. Y., May 21, 1904.
- MOORE, Victor (actor); b. Hammononton, N. J., Feb. 24, 1876.
- MORGAN, Dennis (Stanley Morner) (actor); b. Prentice, Wis., Dec. 10, 1920.
- MORGAN, Frank (Frank Wupperman) (actor); b. New York City, June 1, 1890.
- MORGAN, Henry (Henry von Ost, Jr.) (comedian); b. N. Y. C., Mar. 31, 1915.
- MORGAN, Ralph (actor); b. New York City, July 6, 1888.
- MUNI, Paul (Muni Welsenfreund) (actor); b. Lemberg, Aus., Sept. 22, 1895.
- MURPHY, George (actor); b. New Haven, Conn., July 4, 1904.
- MURRAY, Arthur (dancing teacher); b. New York City, Apr. 4, 1895.
- NATHAN, George Jean (critic); b. Ft. Wayne, Ind., Feb. 14, 1882.
- NATWICK, Mildred (actress); b. Baltimore, Md., June 19, 1908.
- NEAGLE, Anna (Marjorie Robertson) (actress); b. nr. London, Eng., Oct. 20, 1904.
- NEGRI, Pola (Appollonia Chalupec) (actress); b. Lipno, Pol., 1899.
- NICHOLS, Dudley (producer, director); b. Wapakoneta, Ohio, Apr. 6, 1895.
- NIJINSKY, Waslaw (dancer); b. Kiev, Rus., Feb. 28, 1890.
- NILES, John Jacob (folksinger); b. Louisville, Ky., Apr. 28, 1892.
- NIVEN, David (actor); b. Scotland.
- NOBLE, Ray (band ldr.); b. Brighton, Eng., Dec. 17, 1908.
- NUGENT, Elliott (actor, director); b. Dover, Ohio, Sept. 20, 1899.
- OAKIE, Jack (Lewis Offield) (actor); b. Sedalia, Mo., Nov. 12, 1903.
- OBERON, Merle (Merle O'Brien Thompson) (actress); b. Tasmania, Feb. 19, 1911.
- O'BRIEN, Margaret (actress); b. Los Angeles, Calif., Jan. 15, 1937.
- O'BRIEN, Pat (actor); b. Milwaukee, Wis., Nov. 11, 1899.
- O'HARA, Maureen (Maureen Fitzsimmons) (actress); b. Dublin, Ire., Aug. 17, 1920.
- OLIVIER, Sir Laurence (actor); b. Dorking, Eng., May 22, 1907.
- OLSEN, Ole (actor); b. Wabash, Ind.
- O'SULLIVAN, Maureen (actress); b. Boyle, Ire., May 17, 1911.
- OUSPENSKAYA, Maria (actress); b. Tula, Rus., July 29, 1887.
- OWEN, Reginald (actor); b. Wheathampstead, Eng., Aug. 5, 1887.
- PALMER, Lilli (actress); b. Posen, Germany, May 27, 1917.
- PARKER, Jean (Mae Green) (actress); b. Deer Lodge, Mont.
- PARKS, Larry (actor); b. Olathe, Kans.
- PASTERNAK, Joseph (producer); b. Simleul-Silvaniei, Rum., Sept. 19, 1901.
- PAXINOU, Katina (actress); b. Piraeus, Greece.
- PAYNE, John (actor); b. Roanoke, Va.
- PECK, Gregory (actor); b. La Jolla, Calif., Apr. 5, 1916.
- PIAF, Edith (singer); b. Paris, Fr.
- PICKFORD, Mary (actress); b. Toronto, Can., Apr. 8, 1893.
- PIDGEON, Walter (actor); b. East St. John, Can., Sept. 23, 1898.
- PORTER, Cole (song writer); b. Peru, Ind., June 9, 1893.
- POWELL, Dick (actor); b. Mt. View, Ark., Nov. 14, 1904.
- POWELL, William (actor); b. Pittsburgh, Pa., July 29, 1892.
- POWER, Tyrone (actor); b. Cincinnati, Ohio, May 5, 1914.
- PREMINGER, Otto (producer, director); b. Vienna, Aus., Dec. 5, 1906.
- PRICE, Vincent (actor); b. St. Louis, Mo., May 27, 1911.
- RAFT, George (actor); b. New York City, Sept. 27, 19??.
- RAINER, Luise (actress); b. Vienna, Aus., 1912.

AINES, Ella (actress); b. Snoqualmie Falls, Wash., Aug. 6, 1921.

AINS, Claude (actor); b. London, Eng., Nov. 10, 1889.

ANK, J. Arthur (producer); b. Hull, Eng., Dec. 23, 1888.

ATHBONE, Basil (actor); b. Johannesburg, U. of S. Af., June 13, 1892.

ATOFF, Gregory (director); b. St. Petersburg, Rus., Apr. 20, 1897.

EAGAN, Ronald (actor); b. Tampico, Ill.

EDGRAVE, Michael (actor); b. Bristol, Eng., Mar. 20, 1908.

ICE, Florence (actress); b. Cleveland, Ohio, Feb. 14, 1911.

RICHARDSON, Ralph (actor); b. Cheltenham, Eng., Dec. 19, 1902.

OBBS, Jerome (J. Rabinowitz) (choreographer); b. New York City, Oct. 11, 1918.

OBINSON, Bill (dancer); b. Richmond, Va., May 25, 1878.

OBINSON, Edward G. (actor); b. Bucharest, Rum., Dec. 12, 1893.

OBSON, Flora (actress); b. South Shields, Eng., Mar. 28, 1902.

OC, Patricia (actress); b. London, Eng., June 7, 1918.

OCHESTER (Eddie Anderson) (comedian); b. Oakland, Calif., Sept. 18, 1905.

ODGERS, Richard (song writer); b. New York City, June 28, 1902.

OGERS, Ginger (Virginia McMath) (actress, dancer); b. Independence, Mo., July 16, 1911.

OGERS, Roy (Leonard Slye) (actor); b. Cincinnati, Ohio, Nov. 5, 1912.

OMBERG, Sigmund (operetta composer); b. Szeged, Hung., July 29, 1887.

OMERO, Cesar (actor); b. New York City, Feb. 15, 1907.

OONEY, Mickey (Joe Yule, Jr.) (actor); b. Brooklyn, N. Y., Sept. 23, 1922.

OSE, Billy (producer); b. New York City, Sept. 6, 1899.

OGGLES, Charles (actor); b. Los Angeles, Calif., Feb. 8, 1892.

OSSELL, Rosalind (actress); b. Waterbury, Conn., June 4, 1912.

BLON, Jean (singer); b. Paris, Fr., Mar. 25, 1912.

. DENIS, Ruth (dancer); b. Newark, N. J., Jan. 20, 1880.

NDERS, George (actor); b. St. Petersburg, Rus., 1906.

OVO, Jimmie (entertainer); b. New York City, 1895.

HARY, Dore (producer); b. Newark, N. J., Aug. 31, 1905.

HILDKRAUT, Joseph (actor); b. Vienna, Aus., Mar. 22, 1895.

SCOTT, Hazel (pianist); b. Port of Spain, Trin., June 11, 1920.

SCOTT, Martha (actress); b. Jamesport, Mo., Sept. 22, 1916.

SCOTT, Raymond (band leader); b. Brooklyn, N. Y., Sept. 10, 1909.

SCOTT, Zachary (actor); b. Austin, Tex., Feb. 24, 1914.

SELZNICK, David O. (producer); b. Pittsburgh, Pa., May 10, 1902.

SHAWN, Ted (dancer); b. Kansas City, Mo., Oct. 21, 1891.

SHEAN, Al (Al Schonberg) (actor); b. Dornum, Ger., 1868.

SHEARER, Norma (actress); b. Montreal, Can., Aug. 10, 1902.

SHERIDAN, Ann (actress); b. Denton, Tex., Feb. 21, 1915.

SHIRLEY, Anne (Dawn Paris) (actress); b. New York City, Apr. 17, 1918.

SHORE, Dinah (actress, singer); b. Winchester, Tenn., Mar. 1, 1917.

SIDNEY, Sylvia (Sophia Koskow) (actress); b. New York City, Aug. 8, 1910.

SIMON, Simone (actress); b. Marseille, Fr., Apr. 23, 1914.

SINATRA, Frank (actor, singer); b. Hoboken, N. J., 1918.

SKELTON, Red (Richard) (actor); b. Vincennes, Ind., July 18, 1913.

SKINNER, Cornelia Otis (actress); b. Chicago, Ill., May 30, 1901.

SLEEPER, Martha (actress); b. Lake Bluff, Ill., June 24, 1911.

SLEZAK, Walter (actor); b. Vienna, Aus., May 3, 1902.

SMITH, C. Aubrey (actor); b. London, Eng., July 21, 1863.

SMITH, Kate (singer); b. Washington, D. C., 1910.

SONDERGAARD, Gale (actress); b. Litchfield, Minn.

SOTHERN, Ann (Harriet Lake) (actress); b. Valley City, N. Dak., Jan. 22, 1911.

STANWYCK, Barbara (Ruby Stevens) (actress); b. Brooklyn, N. Y., July 16, 1907.

STEWART, James (actor); b. Indiana, Pa., May 20, 1908.

STICKNEY, Dorothy (actress); b. Dickinson, N. Dak., June 21, 1900.

STONE, Ezra (actor, director); b. New Bedford, Mass., Dec. 2, 1917.

STONE, Fred A. (actor); b. Valmont, Colo., Aug. 19, 1873.

STURGES, Preston (Preston Biden) (playwright, director); b. Chicago, Ill., Aug. 29, 1898.

SULLAVAN, Margaret (actress); b. Norfolk, Va., May 16, 1911.

TANDY, Jessica (actress); b. London, Eng., June 7, 1909.

TAUROG, Norman (director); b. Chicago, Ill., Feb. 23, 1899.

TAYLOR, Robert (S. Arlington Brugh) (actor); b. Filley, Nebr., Aug. 5, 1911.

TEARLE, Godfrey (actor); b. New York City, Oct. 12, 1884.

TEMPLE, Shirley (actress); b. Santa Monica, Calif., Apr. 23, 1928.

THORNHILL, Claude (band ldr.); b. Terre Haute, Ind., Aug. 10, 1908.

TIERNEY, Gene (actress); b. Brooklyn, N. Y., Nov. 20, 1920.

TODD, Ann (actress); b. Hartford, Cheshire, Eng., Jan. 24, 1910.

TONE, Franchot (actor); b. Niagara Falls, N. Y., Feb. 27, 1905.

TOOMEY, Regis (actor); b. Pittsburgh, Pa., Aug. 13, 1902.

TRACY, Spencer (actor); b. Milwaukee, Wis., Apr. 5, 1900.

TRAVERS, Henry (actor); b. Ireland.

TREACHER, Arthur V. (actor); b. Brighton, Eng.

TREVOR, Claire (actress); b. New York City, Mar. 8, 1909.

TRUEX, Ernest (actor); b. Kansas City, Mo., Sept. 19, 1890.

TUCKER, Sophie (Sophie Abuza) (actress, entertainer); b. Boston, Mass., 1884.

TUFTS, Sonny (actor); b. Boston, Mass.

TURNER, Lana (actress); b. Wallace, Idaho, Feb. 8, 1920.

VALLEE, Rudy (actor, band leader); b. Island Pond, Vt., July 28, 1901.

VENUTA, Benay (singer); b. San Francisco, Calif., Jan. 27, 1912.

VIDOR, King (director, producer); b. Galveston, Tex., Feb. 8, 1895.

VON STROHEIM, Erich (actor, director); b. Vienna, Aus., Sept. 22, 1885.

WALKER, Robert (actor); b. Salt Lake City, Utah.

WARING, Fred (band leader); b. Tyrone, Pa., June 9, 1900.

WATERS, Ethel (actress, singer); b. Chester, Pa., Oct. 31, 1900.

WEBB, Clifton (actor); b. Indiana, 1891.

WEBSTER, Margaret (actress, director); b. New York City, Mar. 15, 1905.

WELLES, Orson (actor, director); b. Kenosha, Wis., May 6, 1915.

WEST, Mae (actress); b. Brooklyn, N. Y., Aug. 17, 1892.

WHITEMAN, Paul (band leader); b. Denver, Colo., 1891.

WILDE, Cornel (actor); b. New York City, Oct. 13, 1915.

WINNINGER, Charles (actor); b. Athens, Wis., May 26, 1884.

WOOD, Sam (director, producer); b. Philadelphia, Pa., July 10, 1884.

WOOLLEY, Monte (actor); b. New York City, Aug. 17, 1888.

WRIGHT, Teresa (actress); b. New York City, Oct. 27, 1918.

WYATT, Jane (actress); b. Campgaw, N. J., Aug. 12, 1912.

WYLER, William (director); b. Mulhouse, Fr., July 1, 1902.

WYMAN, Jane (Sarah Folks) (actress); b. St. Joseph, Mo., Jan. 1, 1914.

WYNN, Ed (actor); b. Philadelphia, Pa., Nov. 9, 1886.

WYNN, Keenan (actor); b. New York City, July 27, 1918.

YOUNG, Loretta (actress); b. Salt Lake City, Utah, Jan. 6, 1913.

YOUNG, Robert (actor); b. Chicago, Ill., Feb. 22, 1907.

YOUNG, Roland (actor); b. London, Eng., Nov. 11, 1887.

YURKA, Blanche (actress); b. St. Paul, Minn., June 19, 1893.

ZANUCK, Darryl F. (director); b. Wahoo, Nebr., Sept. 5, 1902.

ZORINA, Vera (Eva Hartwig) (dancer); b. Kristiansand, Nor., Jan. 2, 1917.

ZUKOR, Adolph (producer); b. Ricsa, Hung., Jan. 7, 1873.

Literature

ADAMIC, Louis (novelist); b. Blato, Dalmatia, Mar. 23, 1899.

ADAMS, Franklin P. (columnist); b. Chicago, Ill., Nov. 15, 1881.

ADAMS, James Truslow (historian); b. Brooklyn, N. Y., Oct. 18, 1878.

ADAMS, Samuel Hopkins (novelist); b. Dunkirk, N. Y., Jan. 26, 1871.

ADLER, Mortimer J. (philosopher); b. New York City, Dec. 28, 1902.

AIKEN, Conrad (poet); b. Savannah, Ga., Aug. 5, 1889.

AKINS, Zoë (playwright); b. Humansville, Mo., Oct. 30, 1886.

ALDINGTON, Richard (poet); b. Hampshire, Eng., 1892.

ALLEN, William Hervey (novelist); b. Pittsburgh, Pa., Dec. 8, 1889.

ANDERSON, Maxwell (playwright); b. Atlantic, Pa., Dec. 15, 1888.

ARAGON, Louis (poet); b. 1897.

ASCH, Sholem (novelist); b. Kutno, Pol., Nov. 1, 1880.

AUDEN, Wystan Hugh (poet); b. York, Eng., Feb. 21, 1907.

BALDWIN, Faith (novelist); b. New Rochelle, N. Y., Oct. 1, 1893.

- JARNES, Margaret Ayer (novelist); b. Chicago, Ill., Apr. 8, 1886.
- JARRY, Philip (playwright); b. Rochester, N. Y., June 18, 1896.
- KAUM, Vicki (novelist); b. Vienna, Aus., Jan. 24, 1896.
- KEARD, Mary R. (sociologist); b. Indianapolis, Ind., Aug. 5, 1876.
- KERBOHM, Sir Max (novelist); b. London, Eng., Aug. 24, 1872.
- KERMAN, Samuel N. (playwright); b. Worcester, Mass., June 9, 1893.
- KEMLMANS, Ludwig (essayist); b. Meran, Tirol, Apr. 27, 1898.
- KENAVENTE y MARTÍNEZ, Jacinto (playwright); b. Madrid, Sp., Aug. 12, 1866.
- KENET, William Rose (poet); b. Ft. Hamilton, N. Y. Harbor, Feb. 2, 1886.
- KOTTOME, Phyllis (novelist); b. Rochester, Eng., May 31, 1884.
- KOYLE, Kay (novelist, poet); b. St. Paul, Minn., Feb. 19, 1903.
- KRECHT, Bertolt (playwright); b. Germany, 1898.
- KROMFIELD, Louis (novelist); b. Mansfield, Ohio, Dec. 27, 1896.
- KROOKS, Van Wyck (critic); b. Plainfield, N. J., Feb. 16, 1886.
- KUCK, Pearl S. (novelist); b. Hillsboro, W. Va., June 26, 1892.
- KUNIN, Ivan (novelist); b. Voronezh, Rus., Oct. 10, 1870.
- KABELL, James Branch (novelist); b. Richmond, Va., Apr. 14, 1879.
- KAIN, James M. (novelist); b. Annapolis, Md., July 1, 1892.
- KALDWELL, Erskine (novelist); b. White Oak, Ga., Dec. 17, 1903.
- KANBY, Henry Seidel (critic); b. Wilmington, Del., Sept. 6, 1878.
- KAPOTE, Truman (novelist); b. New Orleans, La., Sept. 30, 1924.
- KARROLL, Paul Vincent (playwright); b. Dundalk, Ire., July 10, 1900.
- KRISTIE, Agatha (novelist); b. Torquay, Eng., 1897.
- KOCTEAU, Jean (poet); b. Maisons-Laffitte, Fr., July 5, 1891.
- KOFFIN, Robert P. T. (poet); b. Brunswick, Maine, Mar. 18, 1892.
- KOLUM, Padraic (poet, playwright); b. Longford, Ire., Dec. 8, 1881.
- KOMMAGER, Henry S. (historian); b. Pittsburgh, Pa., Oct. 25, 1902.
- KONNELLY, Marc (playwright); b. McKeesport, Pa., Dec. 13, 1890.
- KORWIN, Norman (radio dramatist); b. Boston, Mass., May 3, 1910.
- KOSTAIN, Thomas Bertram (novelist); b. Brantford, Can., May 8, 1885.
- COWARD, Noel (playwright); b. Teddington, Eng., Dec. 16, 1899.
- CROCE, Benedetto (philosopher); b. Pescasseroli, It., Feb. 25, 1866.
- CRONIN, Archibald J. (novelist); b. Cardross, Scot., July 19, 1896.
- CROTHERS, Rachel (playwright); b. Bloomington, Ill., Dec. 12, 1878.
- CROUSE, Russel (playwright); b. Findlay, Ohio, Feb. 20, 1893.
- CUMMINGS, Edward E. (poet); b. Cambridge, Mass., Oct. 14, 1894.
- DAVENPORT, Marcia (novelist); b. New York City, June 9, 1903.
- DAVIS, Elmer (novelist, essayist); b. Aurora, Ind., Jan. 13, 1890.
- de la MARE, Walter (poet); b. Charlton, Eng., Apr. 25, 1873.
- DEUTSCH, Babette (poet, novelist); b. New York City, Sept. 22, 1895.
- DE VOTO, Bernard (novelist, critic); b. Ogden, Utah, Jan. 11, 1897.
- DEWEY, John (philosopher); b. Burlington, Vt., Oct. 20, 1859.
- DOS PASSOS, John (novelist); b. Chicago, Ill., Jan. 14, 1896.
- DOUGLAS, Lloyd (novelist); b. Columbia City, Ind., Aug. 27, 1877.
- DOUGLAS, Norman (novelist); b. Scotland, Dec. 8, 1868.
- du MAURIER, Daphne (novelist); b. London, Eng., May 13, 1907.
- EASTMAN, Max (social writer); b. Canadaigua, N. Y., Jan. 4, 1883.
- EDMAN, Irwin (philosopher); b. New York City, Nov. 28, 1896.
- EDMONDS, Walter (novelist); b. Boonville, N. Y., July 15, 1903.
- ELIOT, Thomas S. (poet, essayist); b. St. Louis, Mo., Sept. 26, 1888.
- ERSKINE, John (novelist); b. New York City, Oct. 5, 1879.
- FADIMAN, Clifton (critic); b. New York City, May 15, 1904.
- FARRELL, James T. (novelist); b. Chicago, Ill., Feb. 27, 1904.
- FAST, Howard (novelist); b. New York City, Nov. 11, 1914.
- FAULKNER, William (novelist); b. New Albany, Miss., Sept. 25, 1897.
- FERBER, Edna (novelist); b. Kalamazoo, Mich., Aug. 15, 1887.
- FEUCHTWANGER, Lion (novelist); b. Munich, Ger., July 7, 1884.
- FISHER, Dorothy Canfield (novelist); b. Lawrence, Kans., Feb. 17, 1879.
- FISHER, Vardis (novelist); b. Annis, Idaho, Mar. 31, 1895.
- FLETCHER, John Gould (poet); b. Little Rock, Ark., Jan. 3, 1886.

- FORSTER, Edward M. (novelist); b. England, 1879.
- FRANK, Waldo (novelist); b. Long Branch, N. J., Aug. 25, 1889.
- FRANKEN, Rose (playwright, novelist); b. Gainesville, Tex., 1898.
- FREEMAN, Douglas S. (historian); b. Lynchburg, Va., May 16, 1886.
- FROST, Robert (poet); b. San Francisco, Calif., Mar. 26, 1875.
- GALLICO, Paul (short story writer); b. New York City, July 26, 1897.
- GARDNER, Earle Stanley (novelist); b. Malden, Mass., July 17, 1889.
- GIDE, André (novelist, essayist); b. Paris, Fr., Nov. 21, 1869.
- GOLDING, Louis (novelist); b. Manchester, Eng., Nov. 19, 1895.
- GRAVES, Robert (poet, novelist); b. London, Eng., July 26, 1895.
- GREEN, Paul (playwright); b. Lillington, N. C., Mar. 17, 1894.
- GREGORY, Horace (poet); b. Milwaukee, Wis., Apr. 10, 1898.
- GUNTHER, John (correspondent); b. Chicago, Ill., Aug. 30, 1901.
- HACKETT, Francis (critic, novelist); b. Kilkenny, Ire., Jan. 21, 1883.
- HAMMETT, Dashiell (novelist); b. Maryland, May 27, 1894.
- HAMSUN, Knut (novelist); b. Lom, Nor., Aug. 4, 1859.
- HART, Moss (playwright); b. New York City, Oct. 24, 1904.
- HECHT, Ben (novelist, playwright); b. New York City, Feb. 28, 1894.
- HELLMAN, Lillian (playwright); b. New Orleans, La., June 20, 1905.
- HEMINGWAY, Ernest (novelist); b. Oak Park, Ill., July 21, 1898.
- HERSEY, John R. (novelist); b. Tientsin, China, June 17, 1914.
- HESSE, Hermann (novelist); b. Calw, Ger., July 2, 1877.
- HILLYER, Robert S. (poet); b. East Orange, N. J., June 3, 1895.
- HILTON, James (novelist); b. Leigh, Eng., Sept. 9, 1900.
- HOOK, Sidney (philosopher); b. New York City, Dec. 20, 1902.
- HOUSMAN, Laurence (playwright, novelist); b. Bromsgrove, Eng., July 18, 1865.
- HURST, Fannie (novelist); b. Hamilton, Ohio, Oct. 18, 1889.
- HUXLEY, Aldous (novelist, essayist); b. Godalming, Eng., July 26, 1894.
- ISHERWOOD, Christopher (novelist); b. Disley, Cheshire, Eng., Aug. 26, 1904.
- JACKSON, Charles (novelist); b. Summit, N. J., Apr. 6, 1903.
- JAMESON, Margaret Storm (novelist); b. Whitby, Eng., 1897.
- JEFFERS, Robinson (poet); b. Pittsburgh, Pa., Jan. 10, 1887.
- JENSEN, Johannes V. (novelist, poet); b. Farsø, N. Jutland, Jan. 20, 1873.
- JOHNSON, Josephine Winslow (novelist); b. Kirkwood, Mo., June 20, 1910.
- JOSEPHSON, Matthew (critic, biographer); b. Brooklyn, N. Y., Feb. 15, 1899.
- KANTOR, MacKinlay (novelist); b. Webster City, Iowa, Feb. 4, 1904.
- KAUFMAN, George S. (playwright); b. Pittsburgh, Pa., Nov. 16, 1889.
- KAZIN, Alfred (critic); b. Brooklyn, N. Y., June 5, 1915.
- KENNEDY, Margaret (novelist); b. London, Eng., 1896.
- KEYES, Frances Parkinson (novelist); b. Univ. of Va., July 21, 1885.
- KIERAN, John (editor); b. New York City, Aug. 2, 1892.
- KINGSLEY, Sidney (Sidney Kirschner) (playwright); b. N. Y. C., Oct. 18, 1906.
- KOESTLER, Arthur (novelist); b. Budapest, Hungary, 1905.
- KOMROFF, Manuel (novelist); b. New York City, Sept. 7, 1890.
- LA FARGE, Christopher (poet, novelist); b. New York City, Dec. 10, 1897.
- LA FARGE, Oliver (novelist); b. New York City, Dec. 19, 1901.
- LASKI, Harold J. (social writer); b. Manchester, Eng., 1893.
- LAWSON, John Howard (playwright); b. New York City, Sept. 25, 1895.
- LEAF, Munro (children's writer); b. Hamilton, Md., Dec. 4, 1905.
- LEHMANN, Rosamond (novelist); b. London, Eng., 1903.
- LERNER, Max (social writer); b. Minsk, Rus., Dec. 20, 1902.
- LEWIS, Sinclair (novelist); b. Sauk Center, Minn., Feb. 7, 1885.
- LEWISOHN, Ludwig (novelist, critic); b. Berlin, Ger., May 30, 1883.
- LIN YUTANG (philosopher); b. Changchow, China, Oct. 10, 1895.
- LINDSAY, Howard (playwright); b. Waterford, N. Y., Mar. 29, 1889.
- LOWELL, Robert (Traill Spence, Jr.); b. Boston, Mass., Mar. 1, 1917.
- MACARTHUR, Charles (playwright); b. Scranton, Pa., Nov. 5, 1895.
- MACLEISH, Archibald (poet); b. Glencoe, Ill., May 7, 1892.
- MAETERLINCK, Maurice (playwright); b. Ghent, Belg., Aug. 29, 1862.
- MALRAUX, André (novelist); b. Paris, Fr., Nov. 3, 1895.

- MANN, Thomas (novelist); b. Lübeck, Ger., June 6, 1875.
- MARITAIN, Jacques (philosopher); b. Paris, Fr., Nov. 18, 1882.
- MARQUAND, John P. (novelist); b. Wilmington, Del., Nov. 10, 1893.
- MARTIN DU GARD, Roger (novelist); b. Neuilly-sur-Seine, Fr., 1881.
- MASEFIELD, John (poet); b. Ledbury, Eng., June 1, 1878.
- MASON, F. VAN Wyck (novelist); b. Boston, Mass., Nov. 11, 1901.
- MASTERS, Edgar Lee (poet); b. Garnett, Kans., Aug. 23, 1869.
- MAUGHAM, William Somerset (novelist); b. Paris, Fr., Jan. 25, 1874.
- MAUROIS, André (Émile Herzog) (novelist); b. Elbeuf, Fr., July 26, 1885.
- MENCKEN, Henry L. (critic); b. Baltimore, Md., Sept. 12, 1880.
- MILLAY, Edna St. Vincent (poet); b. Rockland, Maine, Feb. 22, 1892.
- MILNE, Alan A. (novelist, playwright); b. London, Eng., Jan. 18, 1882.
- MISTRAL, Gabriela (Lucila Godoy Alcayaga) (poet); b. Vicuña, Chile, Apr. 7, 1889.
- MITCHELL, Margaret (novelist); b. Atlanta, Ga., 1900.
- MOLNAR, Ferenc (playwright); b. Budapest, Hung., Jan. 12, 1878.
- MORGAN, Charles (novelist); b. Kent, Eng., Jan. 22, 1894.
- MORLEY, Christopher (novelist); b. Haverford, Pa., May 5, 1890.
- MOTLEY, Willard (novelist); b. Chicago, Ill., July 14, 1912.
- NASH, Ogden (poet, humorist); b. Rye, N. Y., Aug. 19, 1902.
- NATHAN, Robert (novelist); b. New York City, Jan. 2, 1894.
- NEVINS, Allan (historian); b. Camp Point, Ill., May 20, 1890.
- NEXÖ, Martin Andersen (novelist); b. Copenhagen, Den., June 26, 1869.
- NORRIS, Kathleen (novelist); b. San Francisco, Calif., July 16, 1880.
- NOYES, Alfred (poet); b. Wolverhampton, Eng., Sept. 16, 1880.
- O'CASEY, Sean (playwright); b. Dublin, Ire., 1881.
- ODETS, Clifford (playwright); b. Philadelphia, Pa., July 18, 1906.
- O'FLAHERTY, Liam (novelist); b. Aran Is., Ire., 1897.
- O'NEILL, Eugene (playwright); b. New York City, Oct. 16, 1888.
- ORTEGA Y GASSET, José (social writer); b. Madrid, Sp., May 9, 1883.
- ORWELL, George (pseudonym) (essayist); b. 1903.
- PARKER, Dorothy (poet, short story writer); b. West End, N. J., Aug. 22, 1893.
- PAUL, Elliot (novelist); b. Malden, Mass., Feb. 13, 1891.
- PEATIE, Donald Culross (nature writer); b. Chicago, Ill., June 21, 1898.
- PERELMAN, Sidney J. (humorist, playwright); b. Brooklyn, N. Y., Feb. 1, 1904.
- PORTER, Katherine Anne (story writer); b. Indian Creek, Tex., May 15, 1894.
- POUND, Ezra (poet); b. Halley, Idaho, Oct. 30, 1885.
- PRIESTLEY, John B. (novelist, playwright); b. Bradford, Eng., Sept. 13, 1894.
- PROKOSCH, Frederic (novelist); b. Madison, Wis., May 17, 1908.
- RANSOM, John Crowe (poet); b. Pulaski, Tenn., Apr. 30, 1888.
- RAWLINGS, Marjorie Kinnan (novelist); b. Washington, D. C., Aug. 8, 1896.
- REMARQUE, Erich Maria (novelist); b. Osnabrück, Ger., June 22, 1898.
- RICE, Elmer (Elmer Reizenstein) (playwright); b. N. Y. C., Sept. 28, 1892.
- RICHARDS, Ivor Armstrong (critic); b. Sandbach, Eng., Feb. 26, 1893.
- ROBERTS, Kenneth (novelist); b. Kennebunk, Maine, Dec. 8, 1885.
- ROMAINS, Jules (novelist); b. Saint-Julien Chaptell, Fr., Aug. 26, 1885.
- RUSSELL, Bertrand (philosopher); b. Trelleck, Eng., May 18, 1872.
- SABATINI, Rafael (novelist); b. Jesi, It., Apr. 29, 1875.
- SACKVILLE-WEST, Victoria (poet, novelist); b. Sevenoaks, Eng., Mar. 9, 1892.
- SANDBURG, Carl (poet, biographer); b. Galesburg, Ill., Jan. 6, 1878.
- SANTAYANA, George (philosopher, poet); b. Madrid, Sp., Dec. 16, 1863.
- SAROYAN, William (story writer, playwright); b. Fresno, Calif., Aug. 31, 1908.
- SARTRE, Jean-Paul (philosopher); b. Paris, Fr., June 21, 1905.
- SASSOON, Siegfried (poet); b. Matfield, Eng., Sept. 8, 1886.
- SCHLESINGER, Arthur M., Jr. (historian); b. Columbus, Ohio, Oct. 15, 1917.
- SCHLESINGER, Arthur M., Sr. (historian); b. Xenia, Ohio, Feb. 27, 1888.
- SHAW, George Bernard (playwright); b. Dublin, Ire., July 26, 1856.
- SHEEAN, Vincent (novelist, essayist); b. Pana, Ill., Dec. 5, 1899.
- SHERIFF, Robert (playwright); b. Kingston-on-Thames, Eng., June 6, 1896.
- SHERWOOD, Robert E. (playwright); b. New Rochelle, N. Y., Apr. 4, 1896.
- SHOLOKHOV, Mikhail (novelist); b. Veshenskaya, Rus., 1905.

- SILLANPÄÄ, Frans Eemil (novelist); b. Hämeenkyrö, Fin., Sept. 16, 1888.
- SINCLAIR, Upton (novelist); b. Baltimore, Md., Sept. 20, 1878.
- SMITH, Betty (novelist); b. Brooklyn, 1904.
- SMITH, Lillian (novelist); b. Jasper, Fla., 1897.
- SPENDER, Stephen (poet); b. nr. London, Eng., Feb. 28, 1909.
- STALLINGS, Laurence (novelist, playwright); b. Macon, Ga., Nov. 25, 1894.
- STEINBECK, John (novelist); b. Salinas, Calif., Feb. 27, 1902.
- STEPHENS, James (novelist, poet); b. Dublin, Ire., 1882.
- STONE, Irving (biographer); b. San Francisco, Calif., July 14, 1903.
- STONG, Philip (novelist); b. Keosauqua, Iowa, Jan. 27, 1899.
- STRIBLING, Thomas S. (novelist); b. Clifton, Tenn., Mar. 4, 1881.
- STRUTHER, Jan (Joyce Anstruther) (novelist); b. London, Eng., June 6, 1901.
- STUART, Jesse (poet, novelist); b. W-Hollow, Ky., Aug. 8, 1907.
- SUCKOW, Ruth (novelist); b. Hawarden, Iowa, Aug. 6, 1892.
- SULLIVAN, Mark (political writer); b. Avondale, Pa., Sept. 10, 1874.
- TAGGARD, Genevieve (poet); b. Waitsburg, Wash., Nov. 28, 1894.
- TATE, Allen (poet); b. Winchester, Ky., Nov. 19, 1899.
- THURBER, James (humorist); b. Columbus, Ohio, Dec. 8, 1894.
- TOYNBEE, Arnold J. (historian); b. London, Eng., Apr. 14, 1889.
- UNDSET, Sigrid (novelist); b. Kalundborg, Den., May 20, 1882.
- UNTERMEYER, Louis (poet, anthologist); b. New York City, Oct. 1, 1885.
- VAN DOREN, Carl (critic, biographer); b. Hope, Ill., Sept. 10, 1885.
- VAN DOREN, Mark (poet, critic); b. Hope, Ill., June 13, 1894.
- VAN DRUTEN, John (playwright); b. London, Eng., June 1, 1901.
- WAKEMAN, Frederic (novelist); b. Scranton, Kans., Dec. 26, 1909.
- WARNER, Sylvia Townsend (novelist, poet); b. Harrow-on-the-Hill, Eng., 1893.
- WAUGH, Alexander (novelist); b. London, Eng., July 8, 1898.
- WAUGH, Evelyn (novelist); b. London, Eng., 1903.
- WEIDMAN, Jerome (novelist); b. New York City, Apr. 4, 1913.
- WESCOTT, Glenway (novelist); b. Kewaskum, Wis., Apr. 11, 1901.
- WEST, Rebecca (Cicely Fairfield) (novelist); b. Edinburgh, Scot., Dec. 25, 1892.
- WHITE, Elwyn B. (poet, humorist); b. Mt. Vernon, N. Y., July 11, 1899.
- WILDER, Thornton (novelist, playwright); b. Madison, Wis., Apr. 17, 1897.
- WILLIAMS, Ben Ames (novelist); b. Macon, Miss., Mar. 7, 1889.
- WILLIAMS, Tennessee (Thomas L.) (playwright); b. Columbus, Miss., Mar. 26, 1914.
- WILLIAMS, Wm. Carlos (novelist, poet); b. Rutherford, N. J., Sept. 17, 1883.
- WILSON, Edmund (critic, novelist); b. Red Bank, N. J., May 8, 1895.
- WILSON, Margaret (novelist); b. Traer, Iowa, Jan. 16, 1882.
- WINWAR, Frances (Francesca Vinciguerra) (novelist); b. Taormina, Sicily, May 3, 1900.
- WRIGHT, Richard (novelist); b. nr. Natchez, Miss., Sept. 4, 1908.
- WYLIE, Philip (novelist); b. Beverly, Mass., May 12, 1902.
- YERBY, Frank (novelist); b. Augusta, Ga., Sept. 5, 1916.
- ZWEIG, Arnold (novelist); b. Grosz-Glogau, Silesia, Nov. 10, 1887.

Public Affairs

- ABDULLAH IBN HUSSEIN (King, Tr.-Jord.); b. Mecca, Hejaz, 1882.
- ALEMÁN, Miguel (Pres., Mex.); b. Sayula, Mex., 1902.
- ARANHA, Oswaldo (For. Min., Braz.); b. Alegrete, Braz., Feb. 15, 1894.
- ATTLEE, Clement R. (Pr. Min., Brit.); b. London, Eng., Jan. 3, 1883.
- AURIOL, Vincent (Pres., Fr.); b. Revel, Fr., Aug. 25, 1884.
- AUSTIN, Warren R. (U. N. Ch. Del., U. S.); b. Highgate, Vt., Nov. 12, 1877.
- AZZAM PASHA, Abdul Rahman (Sec. Gen., Arab Lea.); b. Shobak, Egy., Mar. 8, 1893.
- BARKLEY, Alben W. (Min. Ldr., U. S. Sen.); b. Graves Co., Ky., Nov. 24, 1877.
- BARUCH, Bernard (financier); b. North Carolina, Aug. 19, 1870.
- BEN-GURION, David (Prem., Israel); b. Plónsk, Pol., Oct., 1886.
- BEVIN, Ernest (For. Sec., Brit.); b. Winsford, Eng., 1881.
- BIERUT, Boleslaw (Pres., Pol.); b. Lublin, Pol., Apr. 19, 1892.
- BJORNSSON, Sveinn (Pres., Ice.); b. Iceland, Feb. 27, 1881.
- BLACK, Hugo L. (Just., U. S. Sup. Ct.); b. Harlan, Ala., Feb. 27, 1886.

- , Léon (former Prem., Fr.); b. Paris, Apr. 9, 1872.
- ES, Chester (Chmn., Int. Comm. of Appeal for Children); b. Springfield, Mass., Aug. 5, 1901.
- LEY, Omar N. (U. S. Army Ch. of J.); b. Clark, Mo., Feb. 12, 1893.
- ANIN, Nikolai A. (Min. of Armed Forces, U.S.S.R.); b. 1896.
- ON, Harold H. (Just., U. S. Sup. Ct.); Jamaica Plain, Mass., June 22, 1888.
- ES, James F. (former U. S. Sec. of War); b. Charleston, S. C., May 2, 1879.
- GAN, Sir Alexander (U. N. Rep., U. K.); b. England, Nov. 25, 1884.
- NG KAI-SHEK (Pres., China); b. Kiang-hwa, China, Oct. 31, 1887.
- LEY, Joseph B. (Pr. Min., Austr.); b. Melbourne, Austr., Sept. 22, 1885.
- CHILL, Winston (former Pr. Min., U. K.); b. Oxfordshire, Eng., Nov. 30, 1884.
- K, Thomas C. (U. S. Atty. Gen.); b. Dallas, Tex., Sept. 23, 1899.
- Gen. Lucius (U. S. Mil. Comm., U. S.); b. Marietta, Ga., Apr. 23, 1897.
- ALLY, Thomas T. (U. S. Sen., Tex.); b. McLennan Co., Tex., Aug. 19, 1877.
- ELLO, John A. (Pr. Min., Eire); b. nr. Dublin, Ire., June 20, 1891.
- PS, Sir Stafford (Chanc. of Exch., U. K.); b. Farmoor Manor, Eng., Apr. 24, 1884.
- ON, Hugh (Chanc. of Duchy of Lancaster, Brit.); b. Neath, Wales, Aug. 26, 1884.
- AULLE, Charles (wartime ldr., Fr.); b. Lille, Fr., Nov. 22, 1890.
- LERA, Eamon (Nationalist ldr., Eire); b. New York City, Oct. 14, 1882.
- Y, Thomas E. (Gov., N. Y.); b. Detroit, Mich., Mar. 24, 1902.
- TROV, Georgi (Prem., Bulg.); b. Plovdiv, Bulg., June 18, 1882.
- LAS, Lewis W. (U. S. Amb. to Brit.); b. Mesquite, Ariz., July 2, 1894.
- LAS, William O. (Just., U. S. Sup. Ct.); b. Maine, Minn., Oct. 16, 1898.
- ES, John Foster (U. N. Rep., U. S.); b. Washington, D. C., Feb. 25, 1888.
- A, Eurico G. (Pres., Braz.); b. Curitiba, Braz., May 18, 1885.
- Anthony (former For. Sec., Brit.); b. England, June 12, 1897.
- DI, Luigi (Pres., It.); b. Carrù, It., Apr. 24, 1874.
- , Herbert V. (Ext. Affairs Min., U. K.); b. East Maitland, Austr., Apr. 18, 1894.
- UK I (King, Egy.); b. Cairo, Egy., Apr. 11, 1920.
- FORRESTAL, James (U. S. Sec. Defense); b. Beacon, N. Y., Feb. 15, 1892.
- FRANCO, Francisco (Ch. of State, Sp.); b. El Ferrol, Sp., Dec. 4, 1892.
- FRANKFURTER, Felix (Just., U. S. Sup. Ct.); b. Vienna, Aus., Nov. 15, 1882.
- FRANKS, Sir Oliver S. (Brit. Amb. to U. S.); b. England, Feb. 16, 1905.
- FREDERICK IX (King, Den.); b. nr. Copenhagen, Den., Mar. 11, 1899.
- GASPERI, Alcide de (Prem., It.); b. Pieve Tesino, Aus.-Hung., Apr. 3, 1881.
- GEORGE VI (King, Eng.); b. Sandringham, Eng., Dec. 14, 1895.
- GOTTWALD, Klement (Pres., Czech.); b. Dedidocz, Moravia, Nov. 23, 1896.
- GREEN, William (Pres. of AFL, U. S.); b. Coshocton, Ohio, Mar. 3, 1873.
- GROMYKO, Andrei A. (former U.N. Rep., U.S.S.R.); b. Stayre Gromyki, Rus., July 5, 1909.
- GUSTAVUS V (King, Swed.); b. Drottningholm, Swed., June 16, 1858.
- HAAKON VII (King, Nor.); b. Denmark, Aug. 3, 1872.
- HAILE SELASSIE I (Emp. Eth.); b. Ethiopia, July 17, 1891.
- HARRIMAN, W. Averell (U. S. Amb. of U. S.); b. Nov. 15, 1891.
- HERSHEY, Maj. Gen. Lewis B. (Sel. Serv. Dir., U. S.); b. Steuben Co., Ind., Sept. 12, 1893.
- HIROHITO (Emp., Jap.); b. Japan, Apr. 29, 1901.
- HOFFMAN, Paul (ECA Dir., U. S.); b. Chicago, Ill., Apr. 26, 1891.
- HOOVER, Herbert C. (former Pres., U. S.); b. West Branch, Iowa, Aug. 10, 1874.
- HOOVER, J. Edgar (Dir. FBI, U. S.); b. Washington, D. C., Jan. 1, 1895.
- HUSSEINI, Haj Amin el (Gr. Mufti, Jerus.); b. 1900.
- IBN SA'UD (King, Saudi Arabia); b. Riyadh, Arab., c. 1880.
- INÖNÜ, İsmet (Pres., Turk.); b. Smyrna, Turk., Sept. 24, 1884.
- JACKSON, Robert H. (Just., U. S. Sup. Ct.); b. Spring Creek, Pa., Feb. 13, 1892.
- JESSUP, Philip C. (U. N. Del., U. S.); b. New York City, Jan. 5, 1897.
- JULIANA (Queen, Neth.); b. Apr. 30, 1909.
- KHAN, Liaquat Ali (Pr. Min., Pakistan); b. Karnal, E. Punjab, Oct. 1, 1895.
- KING, William L. Mackenzie (ex-Pr. Min., Can.); b. Berlin, Can., Dec. 17, 1874.
- KRUG, Julius A. (U. S. Sec. Int.); b. Madison, Wis., Nov. 23, 1907.
- LANGHE, Oscar (U. N. Rep., Pol.); b. Tomaszów, Pol., July 27, 1904.

- LEAHY, William D.** (Adm. of Fleet, U. S.); b. Hampton, Iowa, May 6, 1875.
- LEWIS, John L.** (Pres. of UMW, U. S.); b. Lucas, Iowa, Feb. 12, 1880.
- LIE, Trygve** (Sec. Gen., U. N.); b. Oslo, Nor., July 16, 1896.
- LILIENTHAL, David E.** (Ch., Atomic Energy Comm.); b. Morton, Ill., July 8, 1899.
- LOVETT, Robert A.** (U. S. Undersec. State); b. Huntsville, Tex., Sept. 14, 1895.
- MACARTHUR, Gen. Douglas** (Comm., Allied Occup. Forces, Jap.); b. Little Rock barracks, Ark., Jan. 26, 1880.
- MCGRATH, J. Howard** (Chmn., Dem. Natl. Comm.); b. Woonsocket, R. I., Nov. 28, 1903.
- MCNEIL, Hector** (Min. of State, Brit.); b. Garelochhead, Scot., Mar. 10, 1910.
- MALIK, Jacob A.** (Sov. Del. to U.N.); b. Ukraine, 1906.
- MARSHALL, George C.** (U. S. Sec. State); b. Uniontown, Pa., Dec. 31, 1880.
- MARTIN, Joseph W., Jr.** (Spkr. of House, U. S.); b. North Attleboro, Mass., Nov. 3, 1884.
- MICHAEL** (former King, Rum.); b. Sinaia, Rum., Oct. 25, 1921.
- MOLOTOV, Vyacheslav M.** (For. Commis-sar, U.S.S.R.); b. Russia, 1890.
- MORÍNIGO, Higinio** (Pres., Parag.); b. Paraguari, Parag., 1901.
- MORRISON, Herbert S.** (Lord Pres. of Council, Brit.); b. London, Eng., Jan. 3, 1888.
- MURPHY, Frank** (Just., U. S. Sup. Ct.); b. Harbor Beach, Mich., Apr. 13, 1890.
- MURRAY, Philip** (Pres. of CIO, U. S.); b. Blantyre, Scot., May 25, 1886.
- NEHRU, Jawaharlal** (Prem., India); b. Al-lahabad, India, Nov. 14, 1889.
- O'DWYER, William** (Mayor, N. Y. C.); b. Bohola, Ire., July 11, 1890.
- O'KELLY, Sean** (Pres., Elre); b. Dublin, Ire., Aug. 25, 1882.
- PAASIKIVI, Juho K.** (Pres., Fin.); b. Tam-pere, Fin., Nov. 27, 1870.
- PANYUSHKIN, Alexander S.** (Sov. Amb. to U. S.); b. Kuibyshev, Rus., June, 1905.
- PAUL I** (King, Gr.); b. Athens, Gr., Dec. 14, 1901.
- PERÓN, Juan D.** (Pres., Arg.); b. nr. Lobos, Arg., Oct. 8, 1895.
- QUEUILLE, Henri** (Prem., Fr.); b. Neuvi-c de-Ussel, Fr., Mar., 1884.
- RAJAGOPALACHARI, Chakravarthi** (Gov. Gen., India); b. Hosur, India, 1879.
- REED, Stanley F.** (Just., U. S. Sup. Ct.); b. Mason Co., Ky., Dec. 31, 1884.
- RENNER, Karl** (Pres., Aus.); b. Dolne-Dunajovice, Moravia, Dec. 14, 1870.
- REUTHER, Walter P.** (Pres. of UAW, U. S.); b. Wheeling, W. Va., Sept. 1, 1907.
- RHEE, Syngman** (Pres., Korea); b. Whan-hai Prov., Korea, Apr. 26, 1875.
- ROOSEVELT, Eleanor** (U. N. Rep., U. S.); b. New York City, Oct. 11, 1884.
- RUTLEDGE, Wiley B., Jr.** (Just., U. S. Sup. Ct.); b. Cloverport, Ky., July 2, 1894.
- SCHUMAN, Robert** (For. Min., Fr.); b. Luxemburg, Luxem., June 29, 1886.
- SCHVERNIK, Nikolai M.** (Chmn. Presidium of Sup. Counc.); b. Russia, 1888.
- SCOTT, Hugh D., Jr.** (Chmn., Rep. Nat. Comm.); b. Fredericksburg, Va., Nov. 1, 1900.
- SHINWELL, Emanuel** (Chmn., Labour pt. Brit.); b. London, Eng., Oct. 18, 1884.
- SMUTS, Jan Christiaan** (ex-Pr. Min., U. S. Af.); b. Capetown, S. Af., May 24, 1871.
- SNYDER, John W.** (U. S. Sec. of Treas.); b. Jonesboro, Ark., June 21, 1896.
- SOONG, T. V.** (Prem., China); b. Shanghai, China, 1894.
- SPAACK, Paul-Henri** (Pr. Min., Belg.); b. Brussels, Belg., Jan. 25, 1899.
- STALIN, Joseph V.** (Dzhugashvili) (Prem. U.S.S.R.); b. Georgia, Transcaucasus, Dec. 21, 1879.
- STASSEN, Harold E.** (former Gov., Minn. Pres. U. of Penn.); b. West St. Paul, Minn., Apr. 13, 1907.
- TAFT, Robert A.** (U. S. Sen., Ohio); b. Cincinnati, Ohio, Sept. 8, 1889.
- THOMAS, Norman M.** (Socialist ldr., U. S.); b. Marion, Ohio, Nov. 20, 1884.
- THOREZ, Maurice** (Communist ldr., Fr.); b. Noyelles-Godault, Fr., Apr. 28, 1900.
- TITO** (Josip Broz or Brozovich) (Prem. Yugos.); b. nr. Zagreb, Croatia, 1892.
- TOGLIATTI, Palmiro** (Communist ldr., It.); b. Genoa, It., Mar. 26, 1893.
- TRUJILLO y MOLINA, Rafael L.** (Pres. Dom. Rep.); b. San Cristóbal, Dom. Rep., Oct. 24, 1891.
- TRUMAN, Harry S.** (Pres., U. S.); b. L. mar, Mo., May 8, 1884.
- VANDENBURG, Arthur H.** (U. S. Sen., Mich.); b. Grand Rapids, Mich., Mar. 2, 1884.
- VANMOOK, Hubertus J.** (Gov. Gen., Net. E. Ind.); b. Semarang, Java, 1894.
- VINSON, Frederick M.** (Ch. Just., U. S. Sup. Ct.); b. Louisa, Ky., Jan. 22, 1881.
- WALLACE, Henry A.** (former V. P., U. S.); b. Adair Co., Iowa, Oct. 7, 1888.
- WARREN, Earl** (Gov., Calif.); b. Los Angeles, Calif., Mar. 19, 1891.
- WEIZMANN, Chaim** (Pres., Israel); b. Pinsk, Rus., Nov. 27, 1874.
- WILHELMINA** (former Queen, Neth.); b. The Hague, Neth., Aug. 31, 1880.

Science

- EBBOT**, Charles G. (astrophysicist); b. Wilton, N. H., May 31, 1872.
- ALEXANDERSON**, Ernst F. W. (engineer, inventor); b. Upsala, Swed., Jan. 25, 1878.
- ANDERSON**, Carl D. (physicist); b. New York City, Sept. 3, 1905.
- ANDREWS**, Roy Chapman (zoologist, explorer); b. Beloit, Wis., Jan. 26, 1884.
- APPLETON**, Sir Edward V. (physicist); b. England, Sept. 6, 1892.
- ARMSTRONG**, Edwin H. (engineer); b. New York City, Dec. 18, 1890.
- AADE**, Walter (astronomer); b. Schroet- inghausen, Ger., Mar. 24, 1893.
- EEBE**, William (zoologist); b. Brooklyn, N. Y., July 29, 1877.
- ERGIUS**, Friedrich K. R. (chemist); b. Goldschmieden, Silesia, Oct. 11, 1884.
- LODGETT**, Katharine B. (physicist); b. Schenectady, N. Y., Jan. 10, 1898.
- SOHR**, Niels (physicist); b. Copenhagen, Den., Oct. 7, 1885.
- BRAGG**, Sir William L. (physicist); b. Adelaide, Austr., Mar. 31, 1890.
- BUSH**, Vannevar (engineer); b. Everett, Mass., Mar. 11, 1890.
- SYRD**, Richard E. (explorer); b. Winchester, Va., Oct. 25, 1888.
- CHADWICK**, Sir James (physicist); b. Eng- land, Oct. 29, 1891.
- OLE**, Rufus (physician); b. Rowsburg, Ohio, Apr. 30, 1872.
- COMPTON**, Arthur H. (physicist); b. Wooster, Ohio, Sept. 10, 1892.
- COMPTON**, Karl T. (physicist); b. Woos- ter, Ohio, Sept. 14, 1887.
- COOLIDGE**, William D. (physical chemist); b. Hudson, Mass., Oct. 23, 1873.
- ORI**, Carl F. (biochemist); b. Prague, Czech., Dec. 15, 1896.
- ORI**, Gerty T. (biochemist); b. Prague, Czech., Aug. 15, 1896.
- OTTRELL**, Frederick G. (chemist); b. Oakland, Calif., Jan. 10, 1877.
- URIE JOLIOT**, Frédéric (physicist); b. Paris, Fr., Mar. 19, 1900.
- URIE JOLIOT**, Irène (physicist); b. France, 1897.
- AVISSON**, Clinton J. (physicist); b. Bloomington, Ill., Oct. 22, 1881.
- BROGLIE**, Louis Victor (physicist); b. Dieppe, Fr., Aug. 15, 1892.
- KRUIF**, Paul (science writer); b. Zee- land, Mich., Mar. 2, 1890.
- IRAC**, Paul A. M. (physicist); b. Bristol, Eng., Aug. 8, 1902.
- OSISY**, Edward A. (biochemist); b. Hume, Ill., Nov. 13, 1893.
- UNNING**, John R. (physicist); b. Shelby, Nebr., Sept. 24, 1907.
- EINSTEIN**, Albert (physicist); b. Ulm, Ger., Mar. 14, 1879.
- ELLSWORTH**, Lincoln (explorer, engi- neer); b. Chicago, Ill., May 12, 1880.
- ERLANGER**, Joseph (physiologist); b. San Francisco, Calif., Jan. 5, 1874.
- EVANS**, Herbert M. (anatomist); b. Modesto, Calif., Sept. 23, 1882.
- FERMI**, Enrico (physicist); b. Rome, It., Sept. 29, 1901.
- FLEMING**, Sir Alexander (bacteriologist); b. Lochfield, Eng., 1881.
- HAHN**, Otto (physical chemist); b. Frank- fort on Main, Ger., Mar. 8, 1879.
- HALDANE**, John B. S. (geneticist); b. England, Nov. 5, 1892.
- HEISENBERG**, Werner (physicist); b. Ger- many, Dec. 5, 1901.
- HEISER**, Victor G. (hygienist); b. Johns- town, Pa., Feb. 5, 1873.
- HOBGEN**, Lancelot (biologist); b. South- sea, Eng., Dec. 9, 1895.
- HOOTON**, Earnest A. (anthropologist); b. Clemansville, Wis., Nov. 20, 1887.
- HOUSSAY**, Bernardo A. (physiologist); b. Buenos Aires, Arg., Apr. 10, 1887.
- HUBBARD**, Father Bernard R. (geologist, explorer); b. San Francisco, Calif., Nov. 24, 1888.
- HUBBLE**, Edwin P. (astronomer); b. Marshfield, Mo., Nov. 20, 1889.
- HUNTINGTON**, Ellsworth (geographer); b. Galesburg, Ill., Sept. 16, 1876.
- HUXLEY**, Julian S. (biologist); b. Eng- land, June 22, 1887.
- JUNG**, Carl G. (psychiatrist); b. Basel, Switz., July 26, 1875.
- KAPITZA**, Peter L. (physicist); b. Kron- stadt, Rus., July 8, 1894.
- KENNY**, "Sister" Elizabeth (nurse); b. Warriald, Austr., Sept. 20, 1886.
- KETTERING**, Charles F. (engineer); b. nr. Loudonville, Ohio, Aug. 29, 1876.
- KINSEY**, Alfred C. (zoologist, sexologist); b. Hoboken, N. J., June 23, 1894.
- LANGMUIR**, Irving (chemist); b. Brook- lyn, N. Y., Jan. 31, 1881.
- LAWRENCE**, Ernest O. (physicist); b. Can- ton, S. Dak., Aug. 8, 1901.
- LYNCH**, Rev. J. Joseph (seismologist); b. London, Eng., Dec. 6, 1894.
- MacNIDER**, William (pharmacologist); b. Chapel Hill, N. C., June 25, 1881.
- MAYO**, Charles W. (surgeon); b. Roches- ter, Minn., July 28, 1898.
- MEITNER**, Lise (physicist); b. Vienna, Aus., Nov. 7, 1878.
- MENNINGER**, William C. (psychiatrist); b. Topeka, Kans., Oct. 15, 1899.

MILLIKAN, Robert A. (physicist); b. Morrison, Ill., Mar. 22, 1868.
 MINOT, George R. (physician); b. Boston, Mass., Dec. 2, 1885.
 MOULTON, Forest R. (astronomer); b. nr. Le Roy, Mich., Apr. 29, 1872.
 MURPHY, William P. (physician); b. Stoughton, Wis., Feb. 6, 1892.
 NORDEN, Carl L. (inventor); b. Semarang, Java, Apr. 23, 1880.
 OPPENHEIMER, J. Robert (physicist); b. New York City, Apr. 22, 1904.
 PAINTER, Theophilus S. (zoologist); b. Salem, Va., Aug. 22, 1889.
 PARRAN, Thomas (surgeon); b. St. Leonard, Md., Sept. 28, 1892.
 PICCARD, Auguste (physicist); b. Basel, Switz., Jan. 28, 1884.
 PICCARD, Jean Félix (aero. eng.); b. Basel, Switz., Jan. 28, 1884.
 RABI, Isidor I. (physicist); b. Raymanou, Aus., July 29, 1898.
 ROBINSON, Sir Robert (chemist); b. England, Sept. 13, 1886.

RUSSELL, Henry N. (astronomer); b. Oyster Bay, N. Y., Oct. 25, 1877.
 SABIN, Florence R. (anatomist); b. Central City, Colo., Nov. 9, 1871.
 SEABORG, Glenn T. (nuclear chemist); b. Ishpeming, Mich., Apr. 19, 1912.
 SHAPLEY, Harlow (astronomer); b. Nashville, Mo., Nov. 2, 1885.
 SIEGBAHL, Karl M. G. (physicist); b. Örebro, Swed., Dec. 3, 1886.
 STEENBOCK, Harry (biochemist); b. Charlestown, Wis., Aug. 16, 1886.
 STEFANSSON, Vilhjalmur (explorer); b. Arnes, Can., Nov. 3, 1879.
 UREY, Harold C. (chemist); b. Walkerton, Ind., Apr. 29, 1893.
 WAKSMAN, Selman A. (microbiologist); b. Priluki, Rus., July 2, 1888.
 WHIPPLE, George H. (pathologist); b. Ashland, N. H., Aug. 28, 1878.
 ZWORYKIN, Vladimir K. (physicist); b. Mourom, Rus., July 30, 1889.

Leading National Associations and Societies in the United States

(Listed by name, address, year of founding [in parentheses], number of membership and name and title of executive.)

ADULT EDUCATION, American Assn. for; 525 W. 120 St., N. Y. 27, (1926), 2,750, Morse A. Cartwright, Dir.
 ADVANCEMENT OF COLORED PEOPLE, Natl. Assn. for the; 20 W. 40 St., N. Y. 18, (1909), 500,000, Walter White, Exec. Sec.
 ADVERTISERS, Assoc. of Natl.; 285 Madison Ave., N. Y. 17, (1910), 420, Paul B. West, Pres.
 ADVERTISING AGENCIES, American Assn. of; 420 Lexington Ave., N. Y. 17, (1917), 227, Federic R. Gamble, Pres.
 ADVERTISING Fed. of America; 330 W. 42 St., N. Y. 18, (1905), 20,000, Elon G. Bolton, Pres.
 AERONAUTICAL SCIENCES, Inst. of the; 2 E. 64 St., N. Y. 21, (1932), 10,377, John K. Northrop, Pres.
 ALCOHOLIC FOUNDATION (Alcoholics Anonymous); P. O. Box 459, Grand Central Annex, N. Y. 17, (1935), c. 80,000. Address correspondence to the Secretary.
 ARCHITECTS, American Inst. of; 1741 N. Y. Ave. NW, Wash., D.C., (1857), 7,688, Edmund R. Purves, Exec. Dir.
 ARMY & NAVY LEGION OF VALOR of the U.S.; 316 Court House, Pittsburgh 19, (1890), 1,704, Lt. Ben Prager, Natl. Adj.
 ARTS AND LETTERS, American Acad. of; 633 W. 155 St., N. Y. 32, (1904), 48, Paul Manship, Pres.
 ARTS AND LETTERS, Natl. Inst. of; same as above, (1898), 230, Douglas Moore, Pres.
 ARTS AND SCIENCES, American Acad. of; 28 Newbury St., Boston 16, (1780), 962, Howard Mumford Jones, Pres.
 ASTRONOMICAL Society, American; Washburn Observatory, Madison 6, Wis., (1897), 675, Dr. Otto Struve, Pres.
 AUDIT BUREAU OF CIRCULATIONS; 165 W. Wacker Dr., Chicago 1, (1914), 3,234, James N. Shryock, Man. Dir.
 AUDUBON Soc., Natl.; 1000 Fifth Ave., N. Y. 28, (1905), 12,300, John H. Baker, Pres.
 AUTHORS LEAGUE of America; 6 E. 39 St., N. Y. 16, (1912), 7,500, Luise M. Sillicox, Exec. Sec.
 AUTOMOBILE Assn., American; Pa. Ave. at 17 St. NW, Wash. 6, D.C., (1902), c. 2,400,000, R. J. Schmunk, Pres.
 AUTOMOTIVE ENGINEERS, Soc. of; 29 W. 39 St., N. Y. 18, (1905), 16,378, John A. C. Warner, Gen. Man.
 BACTERIOLOGISTS, Soc. of American; Hospital for Joint Diseases, N. Y., (1899), 3,800, Wm. McD. Hamman, Pres.
 BAPTIST HOME MISSION Soc., American; 212 Fifth Ave., N. Y. 10, (1832), G. Pitt Beers, Exec. Sec.
 BAR Assn., American; 1140 N. Dearborn St., Chicago 10, (1878), 41,500, Frank E. Holman, Pres.
 BETTER BUSINESS BUREAUS, Assn. of; 405 Lexington Ave., N. Y., (1946), 91, Victor H. Nyborg, Pres.
 BIBLE Soc., American; 450 Park Ave., N. Y. 22, (1816), c. 100,000, Eric M. North, Gen. Sec.
 BIG BROTHER Movement; 207 Fourth Ave., N. Y. 3, (1904), 1,077, Joseph H. McCoy, Exec. Sec.

- BNAI B'RITH**; 1003 K St. NW, Wash. 1, D.C., (1843), 324,100, Maurice Bisgyer, Sec.
- BOOKSELLERS Assn.**, American; 31 Madison Ave., N. Y. 10, (1900), 1,500, Robert B. Campbell, Pres.
- BOYS' CLUBS of America**; 381 Fourth Ave., N. Y. 16, (1906), 275,000, David W. Armstrong, Exec. Dir.
- BOY SCOUTS of America**; 2 Park Ave., N. Y. 16, (1910), 2,101,292, Arthur A. Schuck, Chief Scout Exec.
- BROADCASTERS**, Natl. Assn. of; 1771 N St. NW, Wash. 6, D.C., (1922), 1,925, Justin Miller, Pres.
- BUSINESS AND PROFESSIONAL Women's Clubs**, Natl. Fed. of; 1819 Broadway, N. Y. 23, (1919), 140,000, Dr. K. Frances Scott, Pres.
- CALENDAR Assn.**, World; 630 Fifth Ave., N. Y. 20, (1930), 13,500, Elisabeth Achelis, Pres.
- CANCER Soc.**, American; 47 Beaver St., N. Y. 4, (1913), 174, Douglass Poteat, Exec. V. Pres.
- CARE, Inc.**; 50 Broad St., N. Y. 4, (1945), 26 agencies, Murray D. Lincoln, Pres.
- CATHOLIC MEN**, Natl. Council of; 1312 Mass. Ave. NW, Wash. 5, D.C., (1920), 3,200 org., Emmet A. Blaes, Pres.
- CATHOLIC WAR VETERANS of the U. S.**; 817 14 St. NW, Wash., D.C., (1935), Anthony H. Forbes, Natl. Comdr.
- CATHOLIC WELFARE Conf.**, Natl.; 1312 Mass. Ave. NW, Wash., D.C., (1919), Rt. Rev. Msgr. Howard J. Carroll, Gen. Sec.
- CERAMIC Soc.**, American; 2525 N. High St., Columbus 2, Ohio, (1899), 4,000, Charles S. Pearce, Gen. Sec.
- CHAMBER of COMMERCE of the U. S.**; 1615 H St. NW, Wash. 6, D.C., (1912), 2,942 assns., Ralph Bradford, Exec. V. Pres.
- CHEMICAL ENGINEERS**, American Inst. of; 120 E. 41 St., N. Y. 17, (1908), 8,735, Stephen L. Tyler, Exec. Sec.
- CHEMICAL Soc.**, American; 1155 15 St. NW, Wash. 6, D.C., (1876), 58,500, Charles A. Thomas, Pres.
- CHEMISTS**, American Inst. of; 60 E. 42 St., N. Y. 17, (1923), 2,300, Lawrence H. Flett, Pres.
- CHILDREN'S AID Soc.**; 105 E. 22 St., N. Y. 10, (1853), Arthur Huck, Exec. Dir.
- CHIROPRACTIC Assn.**, Natl.; National Bldg., Webster City, Iowa, (1930), 6,672, Dr. L. M. Rogers, Exec. Sec.
- CHRISTIAN EDUCATION**, World Council of; 156 Fifth Ave., N. Y. 10, (1889), 37,500,000, Dr. Forrest L. Knapp, Gen. Sec.
- CHRISTIANS AND JEWS**, Natl. Conf. of; 381 Fourth Ave., N. Y. 16, (1928), 85,000, Dr. Everett R. Clinchy, Pres.
- CHURCHES of CHRIST in America**, Federal Council of; 297 Fourth Ave., N. Y. 10, (1908), 27,000,000, Rev. Samuel McCrea Cavert.
- CIVIL ENGINEERS**, American Soc. of; 33 W. 39 St., N. Y. 18, (1852), 23,904, Wm. N. Carey, Exec. Sec.
- CIVIL LIBERTIES Union**, American; 170 Fifth Ave., N. Y. 10, (1920), 12,000, Roger N. Baldwin, Dir.
- CIVITAN Internatl.**; 1525-28 Comer Bldg., Birmingham, Ala., (1920), 13,000, James C. Richardson, Pres.
- COLLEGES**, Assn. of American; 726 Jackson Pl., Wash., D.C., (1915), 648, Dr. Guy E. Snively, Exec. Dir.
- COMPOSERS, AUTHORS AND PUBLISHERS**, American Soc. of (ASCAP); 30 Rockefeller Plaza, N. Y. 20, (1914), 2,280, Fred E. Ahlert, Pres.
- CONGREGATIONAL AND CHRISTIAN CHURCHES**, Board of Home Missions of; 287 Fourth Ave., N. Y., (1826), Truman B. Douglass, Exec. V. Pres.
- CONSULTING ENGINEERS**, American Inst. of; 75 West St., N. Y., (1910), 150, Walter W. Colpitts, Pres.
- DAUGHTERS of the American Revolution (DAR)**; 1720 D St. NW, Washington 6, D.C., (1890), 161,000, Mrs. Roscoe C. O'Byrne, Pres. Gen.
- DECORATORS**, American Inst. of; 41 E. 57 St., N. Y. 22, (1931), c. 60, Karl Bock, Pres.
- DEMOLAY**, Grand Council of the Order of; 201 E. Armour Blvd., Kansas City 2, Mo., (1919), 1,700,000, Frank S. Land, Sec. Gen.
- DENTAL Assn.**, American; 222 E. Superior St., Chicago 11, (1859), 70,533, Dr. Clyde E. Minges, Pres.
- DIETETIC Assn.**, American; 620 N. Michigan Ave., Chicago 11, (1917), c. 8,000, Gladys E. Hall, Exec. Sec.
- DISABLED American Veterans**; 1423 E. McMillan St., Cincinnati 6, (1920), 134,523, Gen. J. M. Wainwright, Natl. Comdr.
- EAGLES**, Grand Aerie Fraternal Order of; 1203 Locust St., Kansas City 6, Mo., (1898), 1,413,000, M. L. Brown, Man. Organizer.
- EDUCATION Assn. of the U. S.**, Natl.; 1201 16 St. NW, Wash., D.C., (1857), 441,127, Willard E. Givens, Exec. Sec.
- ELECTRICAL ENGINEERS**, American Inst. of; 33 W. 39 St., N. Y. 18, (1884), 30,288, H. H. Henline, Sec.
- ELKS of the U. S.**, Benevolent and Protective Order of; 2750 Lake View Ave., Chicago 14, (1868), 950,000, George I. Hall, Grand Exalted Ruler.
- ENGINEERS**, American Assn. of; 8 S. Michigan Ave., Chicago 3, (1915), 6,012, M. E. McIver, Sec.
- EVANGELICAL AND REFORMED CHURCH**, Board of International Missions; Schaaf Bldg., 1505 Race St., Philadelphia 2, (1941), 12, Rev. Dobbs F. Ehlman.
- EXPLORERS Club**; 10 W. 72 St., N. Y. 23, (1905), 750, Dr. Clyde Fisher, Pres.
- FAMILY SERVICE Assn. of America**; 122 E. 22 St., N. Y. 10, (1911), c. 1,000, Frank J. Hertel, Gen. Dir.

- FARM BUREAU Fed., American; 109 N. Wabash Ave., Chicago 2, (1919), 1,275,180, Allan B. Kline, Pres.
- FIRE FIGHTERS, Internatl. Assn. of; 207 AFL Bldg., Wash. 1, D.C., (1918), c. 65,000, John Redmond, Pres.
- FOREIGN POLICY Assn.; 22 E. 38 St., N. Y. 16, (1918), 22,000, Brooks Emeny, Pres.
- FOREIGN RELATIONS, Council on; 58 E. 68 St., N. Y., (1921), 850, Walter H. Mallory, Exec. Dir.
- FORESTERS, Soc. of American; 825 Mills Bldg., Wash. 6, D.C., (1900), 6,000, Henry Clepper, Exec. Sec.
- FOUR-H Clubs; Extension Service, U. S. Dept. of Agr., Wash. 25, D.C., (1914), 2,000,000, M. L. Wilson, Dir.
- FRIENDS' General Conference; 1515 Cherry St., Philadelphia 2, (1900), 18,722, J. Barnard Walton, Sec.
- GIDEONS Internatl.; 212 E. Superior St., Chicago 11, (1898), 16,000, Ren H. Muller, Exec. Dir.
- GIRL SCOUTS of the U. S.; 155 E. 44 St., N. Y. 17, (1912), 1,395,644, Mrs. Paul Rittenhouse, Natl. Dir.
- GRANGE, Natl., Patrons of Husbandry; 744 Jackson Pl. NW, Wash. 6, D.C., (1867), c. 800,000, Albert S. Goss, Master.
- GRAPHIC ARTS, American Inst. of; 115 E. 40 St., N. Y., (1914), Donald S. Klopfer, Pres.
- HADASSAH, Women's Zionist Org.; 1819 Broadway, N. Y. 23, (1912), 275,000, Jeannette N. Leibel, Exec. Sec.
- HEART Assn., American; 1775 Broadway, N. Y., (1924), c. 7,500, Dr. Charles A. R. Connor, Med. Dir.
- HEATING AND VENTILATING ENGINEERS, American Soc. of; 51 Madison Ave., N. Y. 10, (1895), 6,732, A. V. Hutchinson, Sec.
- HEBREW CONGREGATIONS, Union of American; 34 W. 6 St., Cincinnati 2, (1873), 370, Rev. Dr. Maurice N. Elsen-drath, Pres.
- HISTORICAL Assn., American; Library of Congress Annex, Wash. 25, D.C., (1884), 4,900, Guy S. Ford, Exec. Sec.
- HOME AND SCHOOL LIBRARY Assn.; Central Bank Bldg., Lexington 4, Ky., Paul J. Hines, Sec.
- HOME MISSIONS COUNCIL of N. America; 297 Fourth Ave., N. Y. 10, (1908), 23, Dr. Mark A. Dawber, Exec. Sec.
- HOTEL Assn., American; 221 W. 57 St., N. Y. 19, (1910), 5,820, Charles A. Horworth, Exec. V. Pres.
- INFANTILE PARALYSIS, Natl. Foundation for; 120 Broadway, N. Y. 5, (1938), 2,796 chapters, Basil O'Connor, Pres.
- INVESTMENT BANKERS Assn. of America; 33 S. Clark St., Chicago 3, (1912), 700 firms, Hal H. Dewar, Pres.
- IRON AND STEEL Inst., American; 350 Fifth Ave., N. Y. 1, (1908), 2,250, Walter S. Tower, Pres.
- IZAAK WALTON League of America; 81 N. State St., Chicago, (1922), Kenneth A. Reid, Exec. Dir.
- JEWISH Committee, American; 386 Fourth Ave., N. Y. 16, (1906), 13,000, Joseph M. Proskauer, Pres.
- JEWISH CONGRESS, American; 1834 Broadway, N. Y., (1918), Dr. Stephen S. Wise, Pres.
- JEWISH FEDERATIONS AND WELFARE FUNDS, Council of; 165 W. 46 St., N. Y. 19, (1932), 258, Harry L. Lurie, Exec. Dir.
- JEWISH HISTORICAL Soc., American; 3080 Broadway, N. Y. 27, (1892), c. 850, Lee M. Friedman, Pres.
- JEWISH MEN'S CLUBS, Natl. Fed.; 3080 Bway., N. Y. 27, (1929), 25,000, A. S. Bruckman, Pres.
- JEWISH WELFARE BOARD, Natl.; 145 E. 32 St., N. Y. 16, (1913), 500,000, Frank L. Weil, Pres.
- KINDERGARTEN Assn., Natl.; 8 W. 40 St., N. Y. 18, (1909), Bessie Locke, Exec. Sec.
- KIWANIS Internatl.; 520 N. Michigan Ave., Chicago, (1915), 190,000, O. E. Peterson, Sec.
- KNIGHTS OF COLUMBUS; 45 Wall St., New Haven, Conn., (1882), 725,817, John E. Swift, Supreme Knight.
- KNIGHTS OF PYTHIAS; 1054 Midland Bank Bldg., Minneapolis 1, (1864), c. 300,000, Fred Ratliff, Supreme Chancellor.
- LANDSCAPE ARCHITECTS, American Soc. of; 9 Park St., Boston 8, (1899), 545, Bradford Williams, Corr. Sec.
- LEGAL AID Organizations, Natl. Assn. of; 25 Exchange St., Rochester 4, N. Y., (1923), 61, Emery A. Brownell, Sec.
- LEGION, American; 777 N. Meridian St., Indianapolis 6, Ind., (1919), 3,068,586, S. Perry Brown, Natl. Comdr.
- LIBRARIES Assn., Special; 31 E. 10 St., N. Y. 3, (1909), c. 5,500, Mrs. Kathleen B. Stebbins, Exec. Sec.
- LIBRARY Assn., American; 50 E. Huron St., Chicago 11, (1876), 18,000, John Mackenzie Cory, Exec. Sec.
- LIONS CLUBS, Internatl. Assn. of; 350 McCormick Bldg., Chicago 4, (1917), 7,200, Melvin Jones, Sec. Gen.
- LUTHER League of America; 1228 Spruce St., Philadelphia 7, (1895), 30,000, Howard L. Logan, Pres.
- LUTHERAN EDUCATION Assn.; 7,400 Augusta Blvd., River Forest, Ill., (1942), 1,425, A. R. Roschke, Chairman.
- MAGAZINE PUBLISHERS, Natl. Assn. of; 232 Madison Ave., N. Y. 16, (1919), 106 companies, Arch Crawford, Pres.
- MANUFACTURERS, Natl. Assn. of; 14 W. 49 St., N. Y. 20, (1895), 16,000, Earl Bunting, Man. Dir.
- MASONS (Supreme Council, 33°, Ancient Accepted Scottish Rite of Freemasonry); 1117 Statler Bldg., Boston 16, (1813), 2,185, Melvin M. Johnson, Sov. Grand Comdr.

- MATHEMATICAL** Soc., American; 531 W. 116 St., N. Y. 27, (1888), 3,800, J. R. Kline, Sec.
- MAYORS, U. S. Conf. of;** 730 Jackson Pl. NW, Wash. 6, D.C., (1932), 250, Paul V. Betters, Exec. Dir.
- MECHANICAL ENGINEERS,** American Soc. of; 29 W. 39 St., N. Y. 18, (1880), 25,794, C. E. Davies, Sec.
- MEDICAL** Assn., American; 535 N. Dearborn St., Chicago, (1847), 140,260, Dr. George F. Loll, Gen. Man.
- MEDICINE,** N. Y. Acad. of; 2 E. 103 St., N. Y. 29, (1847), c. 2,000, Dr. Howard R. Craig, Dir.
- MENTAL HYGIENE,** Natl. Committee for; 1790 Broadway, N. Y. 19, (1909), 700, Dr. George S. Stevenson, Med. Dir.
- MERCHANT MARINE** Inst., American; 11 Broadway, N. Y. 4, (1905), 67 companies, Frank J. Taylor, Pres.
- METEOROLOGICAL** Soc., American; 5 Joy St., Boston 8, (1919), 3,500, Kenneth C. Spengler, Exec. Sec.
- METHODIST** Youth Fellowship; 810 Broadway, Nashville, Tenn., (1886), 2,000,000, Rev. Hoover Rupert, Dir.
- MILITARY ENGINEERS,** Soc. of American; 808 Mills Bldg., Wash. 6, D.C., (1919), 19,137, Col. F. H. Kohloss, Exec. Sec.
- MINING AND METALLURGICAL ENGINEERS,** American Institute of; 29 W. 39 St., N. Y. 18, (1871), 18,701, A. B. Parsons, Sec.
- MOOSE,** Loyal Order of; Mooseheart, Ill., (1888), 916,283, Malcolm R. Giles, Exec. Dir.
- MOTION PICTURE ARTS AND SCIENCES,** Acad. of; 9038 Melrose Ave., Los Angeles 46, (1927), 1,932, Jean Hersholt, Pres.
- MUSEUMS,** American Assn. of; Smithsonian Institution, Wash. 25, D.C., (1906), 400, Laurence V. Coleman, Dir.
- MUSIC CLUBS,** Natl. Fed. of; 306 S. Wabash Ave., Chicago 4, (1898), c. 450,000, Mrs. Royden J. Keith, Pres.
- NAVY LEAGUE** of the U. S.; 820 Mills Bldg., Wash. 6, D.C., (1902), c. 15,000, Frank A. Hecht, Pres.
- NEW AMERICANS,** United Service for; 15 Park Row, N. Y. 7, (1934), 500, Joseph E. Beck, Exec. Dir.
- NEWSPAPER PUBLISHERS** Assn., American; 370 Lexington Ave., N. Y. 17, (1887), 793, Cranston Williams, Gen. Man.
- NURSES' Assn.,** American; 1790 Broadway, N. Y. 19, (1897), 161,000, Pearl McIver, Pres.
- OSTEOPATHIC** Assn., American; 212 E. Ohio St., Chicago 11, (1897), 8,142, Dr. R. C. McCaughan, Exec. Sec.
- OWLS,** Order of; 31 Wethersfield Ave., Hartford, Conn., (1904), 280,000, Ferdinand D'Esopo, Supreme Pres.
- PALESTINE** Appeal, United; 41 E. 42 St., N. Y. 17, (1926), Mendel N. Fisher, Sec.
- PAN AMERICAN** Union; 17 St. and Constitution Ave. NW, Wash. 6, D.C., (1890), 21 American countries, Dr. Alberto Lleras, Sec. Gen.
- PARENTS AND TEACHERS,** Natl. Congress of; 600 S. Michigan Blvd., Chicago 5, (1897), 5,127,896, Mrs. L. W. Hughes, Pres.
- PARENTS** Assn. of N. Y. C., United; 289 Fourth Ave., N. Y. 10, (1921), 185,000, David I. Ashe, Pres.
- PARKS** Assn., Natl.; 1214 16 St. NW, Wash. 6, D.C., (1919), c. 3,000, Devereux Butcher, Exec. Sec.
- PETROLEUM** Inst., American; 50 W. 50 St., N. Y. 20, (1919), 6,000, Wm. R. Boyd, Jr., Pres.
- PHARMACEUTICAL** Assn., American; 2215 Constitution Ave. NW, Wash. 7, D.C., (1852), 18,000, Robert P. Fischelis, Gen. Man.
- PHILATELIC** Soc., American; P. O. Box 800, State College, Pa., (1886), c. 11,000, H. Clay Musser, Exec. Sec.
- PHOTOGRAPHIC** Soc. of America; 1815 Spruce St., Philadelphia 3, (1934), 8,900, C. B. Phelps, Jr., Pres.
- PHYSICAL** Soc., American; Columbia Univ., N. Y. 27, (1899), 7,342, Dr. J. R. Oppenheimer, Pres.
- PHYSICIANS,** American College of; 4200 Pine St., Philadelphia 4, (1915), 6,238, E. R. Loveland, Exec. Sec.
- PILGRIMS** of the U. S.; 17 E. 42 St., N. Y. 17, (1903), c. 800, John W. Davis, Pres.
- PIONEER YOUTH** of America; 45 Astor Pl., N. Y. 3, (1923), George New, Exec. Dir.
- PLANNED PARENTHOOD** Fed. of America; 501 Madison Ave., N. Y. 22, (1921), 264 comm., Dr. Kenneth Rose, Natl. Dir.
- PLANNING** Assn., Natl.; 800 21 St. NW, Wash. 6, D.C., (1934), 2,500, E. J. Coll, Dir.
- POLITICAL AND SOCIAL SCIENCE,** American Acad. of; 3817 Spruce St., Philadelphia 4, (1889), 13,500, Ernest Minor Patterson, Pres.
- POLITICAL SCIENCE,** Acad. of; Fayerweather Hall, Columbia Univ., N. Y. 27, (1880), 10,404, Ethel Warner, Dir.
- PREVENTION OF CRUELTY TO ANIMALS,** American Soc. for (ASPCA); 50 Madison Ave., N. Y. 10, (1866), 5,612, Sydney H. Coleman, Exec. V. Pres.
- PREVENTION OF WAR,** Natl. Council for; 1013 18 St. NW, Wash., D.C., (1921), 150, Frederick J. Libby, Exec. Sec.
- PSYCHIATRIC** Assn., American; 1270 Ave. of the Americas, N. Y. 20, (1844), 4,765, Dr. Wm. C. Menninger, Pres.
- PUBLIC HEALTH** Assn., American; 1790 Broadway, N. Y. 19, (1872), 11,600, Dr. Reginald M. Atwater, Exec. Sec.
- PUBLIC HEALTH NURSING,** Natl. Org. for; 1790 Broadway, N. Y. 19, (1912), 9,062, Anna Fillmore, Gen. Dir.
- RADIO ENGINEERS,** Inst. of; 1 E. 79 St., N. Y. 21, (1912), 23,000, Stuart L. Bailey, Pres.

- RAILROADS**, Assn. of American; Transportation Bldg., Wash. 6, D.C., (1934), 197, William T. Farley, Pres.
- RECREATION** Assn., Natl.; 815 Fourth Ave., N. Y. 10, (1906), c. 15,000, Howard Braucher, Pres.
- RED CROSS**, American Natl.; 17 and E Sts., Wash., D.C., (1881), 18,110,170, Basil O'Connor, Pres.
- RED MEN**, Improved Order of; 1521-23 W. Girard Ave., Philadelphia 30, (1834), 200,000, Louis Buffler, Great Inchoonee.
- RESEARCH** Council, Natl.; 2101 Constitution Ave., Wash. 25, D.C., (1916), 220, Detlev W. Bronk, Chairman.
- ROSE** Soc., American; P. O. Box 687, Harrisburg, Pa., (1899), 10,815, R. C. Allen, Exec. Sec.
- ROTARY** Internatl.; 35 E. Wacker Dr., Chicago 1, (1905), c. 6,600 clubs, Angus S. Mitchell, Pres.
- RUSSIAN** Inst., American; 58 Park Ave., N. Y. 16, (1926), Ernest C. Ropes, Chairman.
- SAFETY** Council, Natl.; 20 N. Wacker Dr., Chicago 6, (1913), c. 7,500, Ned H. Dearborn, Pres.
- SALVATION** Army; 120 W. 14 St., N. Y. 11, (1865), 210,000, Ernest I. Pugmire, Natl. Comdr.
- SCHOOLS AND COLLEGES** Assn., American; 30 Rockefeller Plaza, N. Y. 20, (1918), Kenneth J. Beebe, Pres.
- SCIENCE**, American Assn. for Advancement of; 1515 Mass. Ave. NW, Wash. 5, D.C., (1848), c. 42,000, H. A. Meyerhoff, Adm. Sec.
- SCIENCES**, Natl. Acad. of; 2101 Constitution Ave., Wash., D.C., (1863), 427, Dr. Alfred N. Richards, Pres.
- SCULPTURE** Soc., Natl.; 1083 Fifth Ave., N. Y. 28, (1893), c. 300, Sidney Waugh, Pres.
- SEAMEN'S** Service, United; 39 Broadway, N. Y., (1942), Wm. S. Newell, Pres.
- SEEING EYE**, Inc.; Morristown, N. J., (1929), 24,000, W. H. Ebeling, Exec. V. Pres.
- SHRINERS** (Islam Temple AAOONS); 650 Geary St., San Francisco, (1883), 9,247, Roy N. Buell, Potentate.
- SOCIAL HYGIENE** Assn., American; 1790 Broadway, N. Y. 19, (1913), 20,000, Dr. Walter Clarke, Exec. Dir.
- SOCIAL WORKERS**, American Assn. of; 130 E. 22 St., N. Y. 10, (1921), 11,500, Joseph P. Anderson.
- SPANISH WAR** Veterans; 40 G St. NE, Wash., D.C., (1904), c. 70,000, Charles R. Barefoot, Comdr.-in-Chief.
- SURGEONS**, American College of; 40 E. Erie St., Chicago 11, (1913), 16,000, Dr. Irvin Abell, Chairman.
- TRAVELERS** Aid Soc. of N. Y.; 144 E. 44 St., N. Y. 17, (1907), 4,900, David W. Haynes, Gen. Dir.
- TUBERCULOSIS** Assn., Natl.; 1790 Broadway, N. Y. 19, (1904), c. 3,700, Dr. James E. Perkins, Man. Dir.
- UNIVERSITY PRESSES**, Assn. of American; c/o Harvard Univ. Press, Cambridge, Mass., (1925), 38, Datus C. Smith, Pres.
- UNIVERSITY PROFESSORS**, American Assn. of; 1101 Conn. Ave. NW, Wash. 6, D.C., (1915), 30,000, Ralph E. Himstead, Gen. Sec.
- UNIVERSITY WOMEN**, American Assn. of; 1634 I St. NW, Wash., D.C., (1881), 101,056, Dr. Althea K. Hottel, Pres.
- VETERANS** Committee, American; 1200 I St. NW, Wash. 1, D.C., (1945), c. 100,000, Chat Paterson, Natl. Chairman.
- VETERANS** of Foreign Wars of the U. S.; Broadway at 34 St., Kansas City 2, Mo., (1899), 1,500,000, H. N. Hensley, Adj. Gen.
- VETERANS** of World War II (AMVETS); 724 Ninth St. NW, Wash., D.C., (1944), 130,000, Harold A. Keats, Natl. Comdr.
- WOMAN'S** Assn., American; 111 E. 48 St., N. Y. 17, (1922), Mrs. Marion L. Van Valkenburgh, Exec. Dir.
- WOMEN** of the U. S., Natl. Council of; 501 Madison Ave., N. Y., (1888), c. 5,000,000.
- WOMEN VOTERS** of U. S., League of; 726 Jackson Pl., Wash. 6, D.C., (1920), 83,000, Anna L. Strauss, Pres.
- WOMEN'S** Clubs, General Fed. of; 1734 N St. NW, Wash. 6, D.C., (1890), c. 11,000,000, Mrs. J. L. Blair Buck, Pres.
- WOMEN'S VOLUNTARY** Services, American; 99 Park Ave., N. Y. 16, (1940), Mrs. Ogden L. Mills, Natl. Pres.
- WOODMEN** CIRCLE, Supreme Forest; 33rd and Farnam, Omaha, Nebr., (1891), 150,649, Mrs. Dora A. Talley, Natl. Pres.
- WOODROW WILSON** Foundation; 45 E. 65 St., N. Y., (1922), Thomas K. Finletter, Pres.
- WORKMEN'S** CIRCLE; 175 E. Broadway, N. Y. 2, (1900), 70,000, Joseph Baskin, Gen. Sec.
- WORLD FEDERALISTS**, United; 7 E. 12 St., N. Y. 3, (1947), 35,000, Cord Meyer, Jr., Pres.
- WORLD PEACE** Foundation; 40 Mt. Vernon St., Boston 8, (1910), Raymond Dennett, Dir.
- WRITERS** CLUB, Natl.; 1835 Champa St., Denver 2, Colo., (1937), 3,200, David Raffelock, Dir.
- YOUNG MEN'S** CHRISTIAN Assns.; 347 Madison Ave., N. Y., (1844).
- YOUNG WOMEN'S** CHRISTIAN Assns.; 600 Lexington Ave., N. Y. 22, (1858), 3,000,000, Mrs. Arthur F. Anderson, Pres.
- YOUTH** HOSTELS, American; Main St., Northfield, Mass., (1934), c. 12,000, Ben W. Miller, Exec. V. Pres.
- ZIONIST** Organization of America; 41 E. 42 St., N. Y. 17, (1897), 247,866, Dr. Emanuel Neumann, Pres.
- ZOOLOGISTS**, American Soc. of; 5700 Ingle-side Ave., Chicago 37, (1901), 1,128, Dr. L. V. Domm, Sec.

NOBEL PRIZES

Nobel prizes are awarded under the will of Alfred Bernhard Nobel, Swedish chemist and engineer, who died in 1896. The interest of the fund is divided annually among the persons who have made the most outstanding contributions in the field of physics, chemistry and physiology or medicine, who have produced the most distinguished literary work, and who have contributed most toward world peace.

Prizes for physics and chemistry are awarded by the Swedish Academy of Science in Stockholm, the one for physiology or medicine by the Caroline Medical Institute in Stockholm, that for literature by the academy in Stockholm, and that for peace by a committee of five elected by the Norwegian Storting. The distribution of prizes was on December 10, 1901, the anniversary of Nobel's death. The amount of each prize with the income from the fund and since 1936 has stood at approximately £8,000.

Literature	Peace
René F. A. Sully Prudhomme (France)	Henri Dunant (Switzerland) and Frederick Passy (France)
Theodor Mommsen (Germany)	Elie Ducommun and Albert Gobat (Switzerland)
Björnstjerne Björnson (Norway)	Sir William R. Cremer (England)
Frédéric Mistral (France) and José Echegaray (Spain)	Institut de Droit International (Belgium)
Henryk Sienkiewicz (Poland)	Bertha von Suttner (Austria)
Giosuè Carducci (Italy)	Theodore Roosevelt (U. S.)
Rudyard Kipling (England)	Ernesto T. Moneta (Italy) and Louis Renault (France)
Rudolf Eucken (Germany)	Klas P. Arnoldson (Sweden) and Frederik Bajer (Denmark)
Selma Lagerlöf (Sweden)	Auguste M. F. Beernaert (Belgium) and Baron Paul H. B. B. d'Estournelles de Constant de Rebecque (France)
Paul von Heyse (Germany)	The Bureau International Permanent de la Paix (Switzerland)
Maurice Maeterlinck (Belgium)	Tobias M. C. Asser (Holland) and Alfred H. Fried (Austria)
Gerhart Hauptmann (Germany)	Elihu Root (U. S.)
Rabindranath Tagore (India)	Henri La Fontaine (Belgium)
Romain Rolland (France)	No award
Verner von Heidenstam (Sweden)	No award
Karl Gjellerup (Denmark) and Henrik Pontoppidan (Denmark)	International Red Cross
Carl Spitteler (Switzerland)	Woodrow Wilson (U. S.)
Knut Hamsun (Norway)	Léon Bourgeois (France)
Anatole France (France)	Karl H. Branting (Sweden) and Christian L. Lange (Norway)
Jacinto Benavente (Spain)	Fridtjof Nansen (Norway)
William B. Yeats (Ireland)	No award
Wladyslaw Reymont (Poland)	No award
George Bernard Shaw (England)	Sir Austen Chamberlain (England) and Charles G. Dawes (U. S.)
Grazia Deledda (Italy)	Aristide Briand (France) and Gustav Stresemann (Germany)
Henri Bergson (France)	Ferdinand Buisson (France) and Ludwig Quidde (Germany)
Sigrid Undset (Norway)	No award
Thomas Mann (Germany)	Frank B. Kellogg (U. S.)
Sinclair Lewis (U. S.)	Lars O. J. Söderblom (Sweden)
Erik A. Karlfeldt (Sweden)	Jane Addams (U. S.) and Nicholas M. Butler (U. S.)
John Galsworthy (England)	No award
Ivan G. Bunin (Russia)	Sir Norman Angell (England)
Luigi Pirandello (Italy)	Arthur Henderson (England)
No award	Carl von Ossietzky (Germany)
Eugene O'Neill (U. S.)	Carlos de S. Lamas (Argentina)
Roger Martin du Gard (France)	Lord Cecil of Chelwood (England)
Pearl S. Buck (U. S.)	Office International Nansen pour les Réfugiés (Switzerland)
Frans Eemil Sillanpää (Finland)	No award

Nobel Prizes—(cont.)

Year	Literature	Peace
1944	Johannes V. Jensen (Denmark)	International Red Cross
1945	Gabriela Mistral (Chile)	Cordell Hull (U. S.)
1946	Hermann Hesse (Switzerland)	Emily G. Balch and John R. Mott (U. S.) American Friends Service Committee (U. S.) and British Society of Friends Service Council (England)
1947	André Gide (France)	

Year	Physics	Chemistry	Medicine
1901	Wilhelm C. Roentgen, for discovery of Roentgen rays.	Jacobus H. van 't Hoff; discovery of laws of chemical dynamics and osmotic pressure in solutions.	Emil A. von Behring, for work on serum therapy against diphtheria.
1902	Hendrik A. Lorentz and Pieter Zeeman, for work on influence of magnetism upon radiation.	Emil Fischer, for experiments in sugar and purin groups of substances.	Sir Ronald Ross, for work on malaria.
1903	Henri A. Becquerel, work on discovery of spontaneous radioactivity. Pierre and Marie Curie, for investigation of phenomena of radiation.	Svante A. Arrhenius, for his electrolytic theory of dissociation.	Niels R. Finsen, for treatment of lupus vulgaris, with concentrated light rays.
1904	John Strutt, Lord Rayleigh, for discovery of argon in investigating gas density.	Sir William Ramsay; discovery and determination of place of inert gaseous elements in air.	Ivan P. Pavlov, for work on the physiology of digestion.
1905	Philipp Lenard, for work with cathode rays.	Adolph von Baeyer, for work on organic dyes and hydroaromatic combinations.	Robert Koch, for work on tuberculosis.
1906	Joseph J. Thomson, for investigations on passage of electricity through gases.	Henri Moissan, for isolation of fluorine, and introduction of electric furnace.	Camillo Golgi and Santiago Ramon y Cajal, for work on structure of the nervous system.
1907	Albert A. Michelson, for spectroscopic and meteorologic investigations.	Eduard Buchner; discovery of cell-less fermentation and investigations in biological chemistry.	Charles L. A. Laveran, for work with protozoa and the generation of disease.
1908	Gabriel Lippmann, for method of reproducing colors by photography.	Ernest Rutherford, for investigations into disintegration of elements and chemistry of radioactive substances.	Paul Ehrlich and Ilya Metchnikoff, for work on immunity.
1909	Guglielmo Marconi and Ferdinand Braun, for development of wireless.	Wilhelm Ostwald, for work on catalysis and investigations into principles governing chemical equilibrium and reaction rates.	Theodor Kocher, for work on the thyroid gland.
1910	Johannes D. van der Waals, for work with the equation of state for gases and liquids.	Otto Wallach, for work in the field of alicyclic compounds.	Albrecht Kossel, for achievements in chemistry of the cell.
1911	Wilhelm Wien, for his laws governing the radiation of heat.	Marie S. Curie, for discovery of elements radium and polonium.	Allvar Gullstrand, for work on the dioptrics of the eye.
1912	Gustaf Dalén, for discovery of automatic regulators used in lighting lighthouses and light buoys.	Victor Grignard, for reagent discovered by and named after him; and Paul Sabatier, for the methods of hydrogenating organic compounds.	Alexis Carrel, for work on vascular ligature and grafting of blood vessels and organs.

Year	Physics	Chemistry	Medicine
13	H. Kamerlingh Onnes, for work leading to production of liquid helium.	Alfred Werner, for linking up atoms within the molecule.	Charles Richet, for work on anaphylaxy.
14	Max von Laue, for discovery of defraction of Roentgen rays passing through crystals.	Theodore W. Richards, for determining atomic weight of many chemical elements.	Robert Bárány, for work on physiology and pathology of the vestibular system.
15	W. H. Bragg and W. L. Bragg, for analysis of crystal structure by means of X rays.	Richard Willstätter, for research into coloring matter of plants, especially chlorophyll.	No award.
17	Charles G. Barkla, discovery of Roentgen radiation of the elements.	No award.	No award.
18	Max Planck, for discoveries in connection with quantum theory.	Fritz Haber, for synthetic production of ammonia.	No award.
19	Johannes Stark, discovery of Doppler effect in Canal rays and decomposition of spectrum lines by electric fields.	No award.	Jules Bordet, for discoveries in connection with immunity.
20	Charles E. Guillaume, for discoveries of anomalies in nickel steel alloys.	Walther Nernst, for work in thermochemistry.	August Krogh, discovery of regulation of capillaries' motor mechanism.
21	Albert Einstein, for discovery of the law of the photoelectric effect.	Frederick Soddy, for investigations into origin and nature of isotopes.	No award.
22	Niels Bohr, for investigations of structure of atoms and radiations emanating from them.	Francis W. Aston, for discovery of isotopes in nonradioactive elements and for discovery of the whole number rule.	In 1923 the 1922 prize was divided between Archibald V. Hill for discovery relating to heat-production in muscles; and Otto Meyerhof, for correlation between consumption of oxygen and production of lactic acid in muscles.
23	Robert A. Millikan, work on elementary charge of electricity and photoelectric phenomena.	Fritz Pregl, for method of microanalysis of organic substances discovered by him.	Frederick G. Banting and John J. R. MacLeod, for discovery of insulin.
24	Karl M. G. Siegbahn, for investigations in X-ray spectroscopy.	No award.	Willem Einthoven, for discovering the mechanism of the electrocardiogram.
25	James Franck and Gustav Hertz, for discovery of laws governing impact of electrons upon atoms.	In 1926 the 1925 prize was awarded to Richard Zsigmondy, for work on the heterogeneous nature of colloid solutions.	No award.
26	Jean Perrin, for works on discontinuous structure of matter and discovery of the equilibrium of sedimentation.	The Svedberg, for work on disperse systems.	Johannes Fibiger, for discovery of the Spiroptera carcinoma.
27	Arthur H. Compton, discovery of Compton phenomenon; and Charles T. R. Wilson, for method of perceiving paths taken by electrically charged particles.	In 1928 the 1927 prize was awarded to Heinrich Wieland, for investigations of bile acids and kindred substances.	Julius Wagner-Jauregg, for use of malaria inoculation in treatment of dementia paralytica.

Nobel Prizes—(cont.)

Year	Physics	Chemistry	Medicine
1928	In 1929 the 1928 prize was awarded to Owen W. Richardson, for work on the phenomenon of thermionics and discovery of the Richardson Law.	Adolf Windaus, for investigations on constitution of the sterols and their connection with vitamins.	Charles Nicolle, for work on typhus exanthematicus.
1929	Prince Louis Victor de Broglie, for discovery of the wave character of electrons.	Arthur Harden and Hans K. A. S. von Euler-Chelpin, for research of fermentation of sugars.	Christiaan Eijkman, for discovery of the anti-neuritic vitamins; and Sir Frederick G. Hopkins, for discovery of growth-promoting vitamins.
1930	Sir Chandrasekhara V. Raman, for work on diffusion of light and discovery of the Raman effect.	Hans Fischer, for work on coloring matter of blood and leaves and for his synthesis of hemin.	Karl Landsteiner, for discovery of human blood groups.
1931	No award.	Carl Bosch and Friedrich Bergius, for invention and development of chemical high-pressure methods.	Otto H. Warburg, for discovery of the character and mode of action of the respiratory ferment.
1932	In 1933 the prize for 1932 was awarded to Werner Heisenberg, for creation of the quantum mechanics.	Irving Langmuir, for work in realm of surface chemistry.	Sir Charles S. Sherrington and Edgar D. Adrian, for discoveries of the function of the neuron.
1933	Erwin Schroedinger and P. A. M. Dirac, for discovery of new fertile forms of the atomic theory.	No award.	Thomas H. Morgan, for discoveries on hereditary function of the chromosomes.
1934	No award.	Harold C. Urey, for discovery of heavy hydrogen.	George H. Whipple, George R. Minot, and William P. Murphy, for discovery of liver therapy against anaemias.
1935	James Chadwick, for discovery of the neutron.	Frédéric and Irène Curie Joliot, for synthesis of new radioactive elements.	Hans Spemann, for discovery of the organizer-effect in embryonic development.
1936	Victor F. Hess, for discovery of cosmic radiation; and Carl D. Anderson, for discovery of the positron.	Peter J. W. Debye, for investigations on dipole moments and diffraction of X rays and electrons in gases.	Sir Henry H. Dale and Otto Loewi, for discoveries on chemical transmission of nerve impulses.
1937	Clinton J. Davisson and George P. Thomson, for discovery of diffraction of electrons by crystals.	Walter N. Haworth, for research on carbohydrates and Vitamin C.	Albert Szent-Györgyi von Nagrapolt, for discoveries on biological combustion.
1938	Enrico Fermi, for identification of new radioactivity elements and discovery of nuclear reactions effected by slow neutrons.	Richard Kuhn, for carotinoid study and vitamin research.	Corneill Heymans, for importance of sinus and aorta mechanisms in the regulation of respiration.
1939	Ernest Orlando Lawrence, for the development of the cyclotron.	Adolf Friedrich Johann Butenandt, for work on sexual hormones (declined the prize) and Leopold Ruzicka, work with polymetylenes.	Gerhard Domagk, antibacterial effect of pron-tocilate.

Year	Physics	Chemistry	Medicine
1933	Otto Stern, for detection of magnetic momentum of protons.	George Hevesy De Heves, for work on use of isotopes as chemical indicators.	Henrik Dam, Edward A. Dolsy for the discovery of the chemical nature of Vitamin K.
1934	Isidor Isaac Rabi, for work on magnetic movements of atomic particles.	Otto Hahn, for work on atomic fission.	Joseph Erlanger and Herbert Spencer Gasser, for work on functions of the nerve threads.
1935	Wolfgang Pauli, for work on atomic fissions.	Artturi Ilmari Virtanen, for research in the field of conservation of fodder.	Sir Alexander Fleming, Ernst Boris Chain, and Sir Howard Florey, for discovery of penicillin.
1936	Percy Williams Bridgman, studies and inventions in high-pressure physics.	James B. Sumner, crystallizing of enzymes. John H. Northrop and Wendell M. Stanley, preparing enzymes and virus proteins in pure form.	Hermann J. Muller, hereditary effects of X-ray on genes.
1937	Sir Edward Appleton, for discovery of layer which reflects radio short waves in the ionosphere.	Sir Robert Robinson, for research in plant substances.	Drs. Carl F. and Gerty T. Cori, for work on animal starch metabolism; Dr. Bernardo A. Houssay, for hormone study of pituitary gland.

(For 1948 Nobel Prize Winners see News Record of 1948)

The Hall of Fame

The Hall of Fame for Great Americans, established in 1900 on the campus of New York University, is an open-air colonnade containing busts of 75 of the 77 persons so far honored for national achievements. New names are voted on every five years by a committee of 100 men and women from all the states. To be elected to the Hall of Fame, an individual must have been dead more than 25 years, must have been a citizen of the U. S. through birth or naturalization, and must receive three-fifths of the committee vote. Nominations may be made by any U. S. citizen. Next election, 1950.

Names	Elected	Names	Elected
John Adams (statesman)	1900	Alexander Hamilton (statesman)	1915
John Quincy Adams (statesman)	1905	Nathaniel Hawthorne (author)	1900
Louis Agassiz (naturalist)	1915	Joseph Henry (physicist)	1915
John James Audubon (naturalist)	1900	Patrick Henry (statesman)	1920
George Bancroft (historian)	1910	Oliver Wendell Holmes (author)	1910
Henry Ward Beecher (clergyman)	1900	Mark Hopkins (educator)	1915
Daniel Boone (explorer)	1915	Elias Howe (inventor)	1915
Edwin Booth (actor)	1925	Washington Irving (author)	1900
Phillips Brooks (clergyman)	1910	Andrew Jackson (statesman)	1910
William Cullen Bryant (poet)	1910	Thomas Jefferson (statesman)	1900
William Ellery Channing (clergyman)	1900	John Paul Jones (naval officer)	1925
Rufus Choate (lawyer)	1915	James Kent (jurist)	1900
Henry Clay (statesman)	1900	Sidney Lanier (poet)	1945
Samuel L. Clemens (Mark Twain)		Robert E. Lee (military officer)	1900
(author)	1920	Abraham Lincoln (statesman)	1900
Grover Cleveland (statesman)	1935	Henry W. Longfellow (poet)	1900
James Fenimore Cooper (author)	1910	James Russell Lowell (poet)	1905
Peter Cooper (manufacturer)	1900	Mary Lyon (educator)	1905
Charlotte S. Cushman (actress)	1915	James Madison (statesman)	1905
James Buchanan Eads (engineer)	1920	Horace Mann (educator)	1900
Jonathan Edwards (clergyman)	1900	John Marshall (jurist)	1900
Ralph Waldo Emerson (author)	1900	Matthew F. Maury (oceanographer)	1930
David G. Farragut (naval officer)	1900	Maria Mitchell (astronomer)	1905
Stephen C. Foster (song composer)	1940	James Monroe (statesman)	1930
Benjamin Franklin (statesman)	1900	Samuel F. B. Morse (inventor)	1900
Robert Fulton (inventor)	1900	William T. G. Morton (dentist)	1920
Ulysses S. Grant (statesman)	1900	John Lothrop Motley (historian)	1910
Lisa Gray (botanist)	1900	Simon Newcomb (astronomer)	1935

The Hall of Fame—(cont.)

Names	Elected	Names	Elected
Thomas Paine* (philosopher)	1945	Gilbert Charles Stuart (painter)	1900
Alice Freeman Palmer (educator)	1920	Booker T. Washington (educator)	1945
Francis Parkman (historian)	1915	George Washington (statesman)	1900
George Peabody (merchant)	1900	Daniel Webster (statesman)	1900
William Penn (colonizer)	1935	J. A. McNeill Whistler (painter)	1930
Edgar Allan Poe (author)	1910	Walt Whitman (poet)	1930
Walter Reed (surgeon)	1945	Eli Whitney (inventor)	1900
Augustus Saint-Gaudens (sculptor)	1920	John Greenleaf Whittier (poet)	1905
William T. Sherman (army officer)	1905	Emma Willard (educator)	1905
Joseph Story (jurist)	1900	Frances Elizabeth Willard (reformer)	1910
Harriet Beecher Stowe (author)	1910	Roger Williams (clergyman)	1920

*Not yet represented by a bust.

Pulitzer Prize Awards, 1917 to 1948

Source: Columbia University, New York.

Pulitzer Prizes in Journalism

Meritorious Public Service

- 1917 No award
 1918 *The New York Times*
 1919 *Milwaukee Journal*
 1920 No award
 1921 *Boston Post*
 1922 *The (N. Y.) World*
 1923 *Memphis Commercial Appeal*
 1924 *The (N. Y.) World*
 1925 No award
 1926 *The (Columbus, Ga.) Enquirer Sun*
 1927 *Canton (Ohio) Daily News*
 1928 *Indianapolis Times*
 1929 *The (N. Y.) Evening World*
 1930 No award
 1931 *Atlanta Constitution*
 1932 *Indianapolis News*
 1933 *New York World-Telegram*
 1934 *Medford (Oreg.) Mail Tribune*
 1935 *The Sacramento Bee*
 1936 *The Cedar Rapids (Iowa) Gazette*
 1937 *St. Louis Post-Dispatch*
 1938 *The Bismarck (N. Dak.) Tribune*
 Special Bronze Plaque:
Edmonton (Alberta) Journal
 1939 *The Miami Daily News*
 1940 *Waterbury (Conn.) Republican and American*
 1941 *St. Louis Post-Dispatch*
 1942 *Los Angeles Times*
 1943 *The (Omaha) World-Herald*
 1944 *The New York Times*
 1945 *The Detroit Free Press*
 1946 *The Scranton (Pa.) Times*
 1947 *The (Baltimore) Sun*
 1948 *The St. Louis Post-Dispatch*

Editorial

- 1917 *New York Tribune*
 1918 *The (Louisville, Ky.) Courier-Journal*
 1919 No award
 1920 HARVEY E. NEWBRANCH (*[Omaha] Evening World-Herald*)
 1921 No award
 1922 FRANK M. O'BRIEN (*The New York Herald*)
 1923 WILLIAM ALLEN WHITE (*The Emporia [Kans.] Gazette*)

- 1924 *The Boston Herald*
 Special prize: FRANK I. COBB (*The [N. Y.] World*)
 1925 *Charleston (S. C.) News and Courier*
 1926 *The New York Times* (EDWARD M. KINGSBURY)
 1927 *The Boston Herald* (F. LAURISTON BULLARD)
 1928 GROVER CLEVELAND HALL (*Montgomery [Ala.] Advertiser*)
 1929 LOUIS ISAAC JAFFE (*Norfolk Virginian-Pilot*)
 1930 No award
 1931 CHARLES S. RYCKMAN (*Fremont [Nebr.] Tribune*)
 1932 No award
 1933 *The Kansas City (Mo.) Star*
 1934 E. P. CHASE (*Atlantic [Iowa] News Telegraph*)
 1935 No award
 1936 FELIX MORLEY (*The Washington [D. C.] Post*)
 GEORGE B. PARKER (*The Scripps-Howard Newspapers*)
 1937 JOHN W. OWENS (*The [Baltimore] Sun*)
 1938 W. W. WAYMACK (*The [Des Moines] Register and Tribune*)
 1939 RONALD G. CALLVERT (*The [Portland] Oregonian*)
 1940 BART HOWARD (*St. Louis Post-Dispatch*)
 1941 REUBEN MAURY (*[N. Y.] Daily News*)
 1942 GEOFFREY PARSONS (*New York Herald Tribune*)
 1943 FORREST W. SEYMOUR (*The [Des Moines] Register and Tribune*)
 1944 *The Kansas City (Mo.) Star* (HENRY J. HASKELL)
 1945 GEORGE W. POTTER (*The Providence [R. I.] Journal-Bulletin*)
 1946 HODDING CARTER (*The [Greenville, Miss.] Delta Democrat-Times*)
 1947 WILLIAM H. GRIMES (*The [N. Y.] Wall Street Journal*)
 1948 VIRGINIUS DABNEY (*Richmond Times-Dispatch*)

Correspondence

- 1929 PAUL SCOTT MOWRER (*Chicago Daily News*)
 1930 LELAND STOWE (*New York Herald Tribune*)
 1931 H. R. KNICKERBOCKER (*Philadelphia Public Ledger and New York Evening Post*)
 1932 WALTER DURANTY (*The New York Times*)
 CHARLES G. ROSS (*St. Louis Post-Dispatch*)
 1933 EDGAR ANSEL MOWRER (*Chicago Daily News*)
 1934 FREDERICK T. BIRCHALL (*The New York Times*)
 1935 ARTHUR KROCK (*The New York Times*)
 1936 WILFRED C. BARBER (*The Chicago Tribune*)
 1937 ANNE O'HARE MCCORMICK (*The New York Times*)
 1938 ARTHUR KROCK (*The New York Times*)
 1939 LOUIS P. LOCHNER (*The Associated Press*)
 1940 OTTO D. TOLISCHUS (*The New York Times*)
 1941 Group award*

*In place of an individual Pulitzer Prize for foreign correspondence, the Trustees approved the recommendation of the Advisory Board that a bronze plaque or scroll be designed and executed to recognize and symbolize the public services and the individual achievements of American news reporters in the war zones of Europe, Asia and Africa from the beginning of the war.

- 1942 CARLOS P. ROMULO (*The [Manilla] Philippines Herald*)
 1943 HANSON W. BALDWIN (*The New York Times*)
 1944 ERNIE PYLE (Scripps-Howard Newspaper Alliance)
 1945 HAROLD V. (HAL) BOYLE (*The Associated Press*)
 1946 ARNALDO CORTESI (*The New York Times*)
 1947 BROOKS ATKINSON (*The New York Times*)
 1948 Discontinued

Cartoon

- 1922 ROLLIN KIRBY (*The [N. Y.] World*)
 1923 No award
 1924 JAY NORWOOD DARLING (*New York Tribune*)
 1925 ROLLIN KIRBY (*The [N. Y.] World*)
 1926 D. R. FITZPATRICK (*St. Louis Post-Dispatch*)
 1927 NELSON HARDING (*Brooklyn Daily Eagle*)
 1928 NELSON HARDING (*Brooklyn Daily Eagle*)
 1929 ROLLIN KIRBY (*The [N. Y.] World*)
 1930 CHARLES R. MACAULEY (*Brooklyn Daily Eagle*)
 1931 EDMUND DUFFY (*The [Baltimore] Sun*)
 1932 JOHN T. MCCUTCHEON (*The Chicago Tribune*)
 1933 HAROLD MORTON TALBUT (*Washington Daily News*)

- 1934 EDMUND DUFFY (*The [Baltimore] Sun*)
 1935 ROSS A. LEWIS (*Milwaukee Journal*)
 1936 No award
 1937 CLARENCE DANIEL BATCHELOR ([N. Y.] *Daily News*)
 1938 VAUGHN SHOEMAKER (*Chicago Daily News*)
 1939 CHARLES G. WERNER (*The [Oklahoma City] Daily Oklahoman*)
 1940 EDMUND DUFFY (*The [Baltimore] Sun*)
 1941 JACOB BURCK (*The [Chicago] Times*)
 1942 HERBERT LAWRENCE BLOCK (*NEA Service*)
 1943 JAY NORWOOD DARLING (*New York Herald Tribune*)
 1944 CLIFFORD K. BERRYMAN (*The Washington [D. C.] Evening Star*)
 1945 BILL MAULDIN (United Features Syndicate, Inc.)
 1946 BRUCE ALEXANDER RUSSELL (*Los Angeles Times*)
 1947 VAUGHN SHOEMAKER (*Chicago Daily News*)
 1948 RUBE GOLDBERG (*The [N. Y.] Sun*)

News Photography

- 1942 MILTON BROOKS (*The Detroit News*)
 1943 FRANK NOEL (*The Associated Press*)
 1944 FRANK FILAN (*The Associated Press*)
 EARLE L. BUNKER (*The [Omaha] World-Herald*)
 1945 JOE ROSENTHAL (*The Associated Press*)
 1946 No award
 1947 ARNOLD HARDY
 1948 FRANK CUSHING (*Boston Traveler*)

National Telegraphic Reporting

- 1942 LOUIS STARK (*The New York Times*)
 1943 No award
 1944 DEWEY L. FLEMING (*The [Baltimore] Sun*)
 1945 JAMES B. RESTON (*The New York Times*)
 1946 EDWARD A. HARRIS (*St. Louis Post-Dispatch*)
 1947 EDWARD T. FOLLIARD (*The Washington [D. C.] Post*)

National Reporting

- 1948 BERT ANDREWS (*New York Herald Tribune*)
 NAT S. FINNEY (*The Minneapolis Tribune*)

International Telegraphic Reporting

- 1942 LAURENCE EDMUND ALLEN (*The Associated Press*)
 1943 IRA WOLFERT (North American Newspaper Alliance, Inc.)
 1944 DANIEL DE LUCE (*The Associated Press*)
 1945 MARK S. WATSON (*The [Baltimore] Sun*)
 1946 HOMER W. BIGART (*New York Herald Tribune*)
 1947 EDDY GILMORE (*The Associated Press*)

International Reporting

1948 PAUL W. WARD (*The [Baltimore] Sun*)

Reporting

1917 HERBERT BAYARD SWOPE (*The [N. Y.] World*)

1918 HAROLD A. LITLEDALE (*New York Evening Post*)

1919 No award

1920 JOHN J. LEARY, JR. (*The [N. Y.] World*)

1921 LOUIS SEIBOLD (*The [N. Y.] World*)

1922 KIRKE L. SIMPSON (*The Associated Press*)

1923 ALVA JOHNSTON (*The New York Times*)

1924 MAGNER WHITE (*San Diego Sun*)

1925 JAMES W. MULROY and ALVIN H. GOLDSTEIN (*Chicago Daily News*)

1926 WILLIAM BURKE MILLER (*The [Louisville, Ky.] Courier-Journal*)

1927 JOHN T. ROGERS (*St. Louis Post-Dispatch*)

1928 No award

1929 PAUL Y. ANDERSON (*St. Louis Post-Dispatch*)

1930 RUSSELL D. OWEN (*The New York Times*)

Special award: W. O. DAPPING (*Auburn [N. Y.] Citizen*)

1931 A. B. MACDONALD (*The Kansas City [Mo.] Star*)

1932 W. C. RICHARDS, D. D. MARTIN, J. S. POOLER, F. D. WEBB, J. N. W. SLOAN (all of *The Detroit Free Press*)

1933 FRANCIS A. JAMIESON (*The Associated Press*)

1934 ROYCE BRIER (*San Francisco Chronicle*)

1935 WILLIAM H. TAYLOR (*New York Herald Tribune*)

1936 LAUREN D. LYMAN (*The New York Times*)

1937 JOHN J. O'NEILL (*New York Herald Tribune*), WILLIAM LEONARD LAURENCE (*The New York Times*), HOWARD W. BLAKESLEE (*The Associated Press*), GOBIND BEHARI LAL (Universal Service), DAVID DIETZ (*The Scripps-Howard Newspapers*)

1938 RAYMOND SPRIGLE (*Pittsburgh Post-Gazette*)

1939 THOMAS L. STOKES (*New York World-Telegram*)

1940 S. BURTON HEATH (*New York World-Telegram*)

1941 WESTBROOK PEGLER (*New York World-Telegram*)

1942 STANTON DELAPLANE (*San Francisco Chronicle*)

1943 GEORGE WELLER (*Chicago Daily News*)

1944 PAUL SCHOENSTEIN and associates (*New York Journal-American*)

1945 JACK S. McDOWELL (*The [San Francisco] Call-Bulletin*)

1946 WILLIAM LEONARD LAURENCE (*The New York Times*)

1947 FREDERICK WOLTMAN (*New York World-Telegram*)

Local Reporting

1948 GEORGE E. GOODWIN (*The Atlanta Journal*)

Special Citation

1941 *The New York Times* for the public educational value of its foreign news report, exemplified by its scope, by excellence of writing and presentation, and supplementary background information, illustration, and interpretation.

1944 BYRON PRICE, Director of the Office of Censorship, for the creation and administration of the newspaper and radio codes.

1945 MRS. WILLIAM ALLEN WHITE, for her husband's interest and services during the past seven years as a member of the Advisory Board of the Graduate School of Journalism, Columbia University. The cartographers of the American press whose maps of the war fronts have helped notably to clarify and increase public information on the progress of the Armies and Navies.

1947 (Pulitzer centennial year.) Columbia University and the Graduate School of Journalism, for their efforts to maintain and advance the high standards governing the Pulitzer Prize awards. The *St. Louis Post-Dispatch*, for its unswerving adherence to the public and professional ideals of its founder and its constructive leadership in the field of American journalism.

1948 DR. FRANK D. FACKENTHAL, for his interest and service during the past years.

History of the Services Rendered to the Public by the American Press during Preceding Year
1918 MINNA LEWISON and HENRY BEETLE HOUGH

Pulitzer Prizes in Letters

Novel

1917 No award
1918 *His Family*. By ERNEST POOLE
1919 *The Magnificent Ambersons*. By BOOTH TARKINGTON
1920 No award
1921 *The Age of Innocence*. By EDITH WHARTON

1922 *Alice Adams*. By BOOTH TARKINGTON
1923 *One of Ours*. By WILLA CATHER
1924 *The Able McLaughlins*. By MARGARET WILSON
1925 *So Big*. By EDNA FERBER
1926 *Arrowsmith*. By SINCLAIR LEWIS
1927 *Early Autumn*. By LOUIS BROMFIELD

the Bridge of San Luis Rey. By THORNTON WILDER
Charlet Sister Mary. By JULIA PETERSON
Laughing Boy. By OLIVER LA FARGE
Stars of Grace. By MARGARET AYER
the Good Earth. By PEARL S. BUCK
the Store. By T. S. STRIBLING
Thumb in His Bosom. By CAROLINE MILLER
Now in November. By JOSEPHINE ENSLOW JOHNSON
Money in the Horn. By HAROLD L. DAVIS
One With the Wind. By MARGARET MITCHELL
the Late George Apley. By JOHN HILLIPS MARQUAND
the Yearling. By MARJORIE KINNAN SAWLINGS
the Grapes of Wrath. By JOHN STEINBECK
 No award
This Our Life. By ELLEN GLASGOW
Dragon's Teeth. By UPTON SINCLAIR
Journey in the Dark. By MARTIN LAVIN
Bell for Adano. By JOHN HERSEY
 No award
the King's Men. By ROBERT PENN ARREN
Isles of the South Pacific. By JAMES MICHENER

Drama

No award
Why Marry? By JESSE LYNCH WILLIAMS
 No award
Beyond the Horizon. By EUGENE NEILL
Miss Lulu Bett. By ZONA GALE
Anna Christie. By EUGENE O'NEILL
Rebound. By OWEN DAVIS
Bell-Bent Fer Heaven. By HATCHER HUGHES
They Knew What They Wanted. By DONEY HOWARD
Maig's Wife. By GEORGE KELLY
Abraham's Bosom. By PAUL GREEN
Strange Interlude. By EUGENE O'NEILL
Street Scene. By ELMER L. RICE
the Green Pastures. By MARC CONNELLY
Johnson's House. By SUSAN GLASPELL
Thee I Sing. By GEORGE S. KAUFMAN
with Your Houses. By MAXWELL ANDERSON
Men in White. By SIDNEY KINGSLEY
the Old Maid. By ZOE AKINS
riot's Delight. By ROBERT E. SHERWOOD
You Can't Take It With You. By MOSS HART and GEORGE S. KAUFMAN
Mr Town. By THORNTON WILDER

1939 *Abe Lincoln in Illinois.* By ROBERT SHERWOOD
 1940 *The Time of Your Life.* By WILLIAM SAROYAN
 1941 *There Shall Be No Night.* By ROBERT E. SHERWOOD
 1942 No award
 1943 *The Skin of Our Teeth.* By THORNTON WILDER
 1944 No award
 1945 *Harvey.* By MARY CHASE
 1946 *State of the Union.* By RUSSEL CROUSE and HOWARD LINDSAY
 1947 No award
 1948 *A Streetcar Named Desire.* By TENNESSEE WILLIAMS

History

1917 *With Americans of Past and Present Days.* By His Excellency J. J. JUSSELAND, Ambassador of France to the United States
 1918 *A History of the Civil War, 1861-1865.* By JAMES FORD RHODES
 1919 No award
 1920 *The War with Mexico.* By JUSTIN H. SMITH
 1921 *The Victory at Sea.* By WILLIAM SOWDEN SIMS in collaboration with BURTON J. HENDRICK
 1922 *The Founding of New England.* By JAMES TRUSLOW ADAMS
 1923 *The Supreme Court in United States History.* By CHARLES WARREN
 1924 *The American Revolution—A Constitutional Interpretation.* By CHARLES HOWARD MCILWAIN
 1925 *A History of the American Frontier.* By FREDERIC L. PAXSON
 1926 *The History of the United States.* By EDWARD CHANNING
 1927 *Pinckney's Treaty.* By SAMUEL FLAGG BEMIS
 1928 *Main Currents in American Thought,* 2 vols. By VERNON LOUIS PARRINGTON
 1929 *The Organization and Administration of the Union Army, 1861-1865.* By FRED ALBERT SHANNON
 1930 *The War of Independence.* By CLAUDE H. VAN TYNE
 1931 *The Coming of the War: 1914.* By BERNADOTTE E. SCHMITT
 1932 *My Experiences in the World War.* By JOHN J. PERSHING
 1933 *The Significance of Sections in American History.* By FREDERICK J. TURNER
 1934 *The People's Choice.* By HERBERT AGAR
 1935 *The Colonial Period of American History.* By CHARLES MCLEAN ANDREWS
 1936 *The Constitutional History of the United States.* By ANDREW C. MC LAUGHLIN
 1937 *The Flowering of New England.* By VAN WYCK BROOKS
 1938 *The Road to Reunion, 1865-1900.* By PAUL HERMAN BUCK
 1939 *A History of American Magazines.* By FRANK LUTHER MOTT

- 1940 *Abraham Lincoln: The War Years.* By CARL SANDBURG
- 1941 *The Atlantic Migration, 1607-1860.* By MARCUS LEE HANSEN
- 1942 *Reveille in Washington.* By MARGARET LEECH
- 1943 *Paul Revere and the World He Lived In.* By ESTHER FORBES
- 1944 *The Growth of American Thought.* By MERLE CURTI
- 1945 *Unfinished Business.* By STEPHEN BONSAI
- 1946 *The Age of Jackson.* ARTHUR M. SCHLESINGER, JR.
- 1947 *Scientists Against Time.* By JAMES PHINNEY BAXTER, 3RD
- 1948 *Across the Wide Missouri.* By BERNARD DeVOTO
- 1942 *Crusader in Crinoline.* By FOR WILSON
- 1943 *Admiral of the Ocean Sea.* By SAM ELIOT MORISON
- 1944 *The American Leonardo: The Life of Samuel F. B. Morse.* By CARLE MABEE
- 1945 *George Bancroft: Brahmin Rebel.* RUSSEL BLAINE NYE
- 1946 *Son of the Wilderness.* By L MARSH WOLFE
- 1947 *The Autobiography of William A. White*
- 1948 *Forgotten First Citizen: John B. Low.* By MARGARET CLAPP

Poetry

- 1918* *Love Songs.* By SARA TEASDALE
- 1919* *Old Road to Paradise.* By MARG WIDDEMER
- Corn Huskers.* By CARL SANDBURG

*Previous to the establishment of this prize in the 1918 and 1919 awards were made from provided by the Poetry Society.

Biography

- 1917 *Julia Ward Howe.* By LAURA E. RICHARDS and MAUDE HOWE ELLIOTT assisted by FLORENCE HOWE HALL
- 1918 *Benjamin Franklin, Self-Revealed.* By WILLIAM CABELL BRUCE
- 1919 *The Education of Henry Adams.* By HENRY ADAMS
- 1920 *The Life of John Marshall.* By ALBERT J. BEVERIDGE
- 1921 *The Americanization of Edward Bok.* By EDWARD BOK
- 1922 *A Daughter of the Middle Border.* By HAMLIN GARLAND
- 1923 *The Life and Letters of Walter H. Page.* By BURTON J. HENDRICK
- 1924 *From Immigrant to Inventor.* By MICHAEL IDVORSKY PUPIN
- 1925 *Barrett Wendell and His Letters.* By M. A. DEWOLFE HOWE
- 1926 *The Life of Sir William Osler.* By HARVEY CUSHING
- 1927 *Whitman.* By EMORY HOLLOWAY
- 1928 *The American Orchestra and Theodore Thomas.* By CHARLES EDWARD RUSSELL
- 1929 *The Training of an American. The Earlier Life and Letters of Walter H. Page.* By BURTON J. HENDRICK
- 1930 *The Raven.* By MARQUIS JAMES
- 1931 *Charles W. Eliot.* By HENRY JAMES
- 1932 *Theodore Roosevelt.* By HENRY F. PRINGLE
- 1933 *Grover Cleveland.* By ALLAN NEVINS
- 1934 *John Hay.* By TYLER DENNETT
- 1935 *R. E. Lee.* By DOUGLAS S. FREEMAN
- 1936 *The Thought and Character of William James.* By RALPH BARTON PERRY
- 1937 *Hamilton Fish.* By ALLAN NEVINS
- 1938 *Pedlar's Progress.* By ODELL SHEPARD
- Andrew Jackson (2 vols.).* By MARQUIS JAMES
- 1939 *Benjamin Franklin.* By CARL VAN DOREN
- 1940 *Woodrow Wilson. Life and Letters, Vol. VII and VIII.* By RAY STANNARD BAKER
- 1941 *Jonathan Edwards.* By OLA ELIZABETH WINSLOW
- 1922 *Collected Poems.* By EDWIN ARLINGTON ROBINSON
- 1923 *The Ballad of the Harp-Weaver. Few Figs from Thistles; Eight Sonnets in American Poetry, 1922, A Miscellany.* By EDNA ST. VINCENT MILLAY
- 1924 *New Hampshire: A Poem with Notes and Grace Notes.* By ROBERT FROST
- 1925 *The Man Who Died Twice.* By EDWIN ARLINGTON ROBINSON
- 1926 *What's O'Clock.* By AMY LOWELL
- 1927 *Fiddler's Farewell.* By LEONORA SPEAR
- 1928 *Tristram.* By EDWIN ARLINGTON ROBINSON
- 1929 *John Brown's Body.* By STEPHEN VINCENT BENET
- 1930 *Selected Poems.* By CONRAD AIKEN
- 1931 *Collected Poems.* By ROBERT FROST
- 1932 *The Flowering Stone.* By GEORGE DILLON
- 1933 *Conquistador.* By ARCHIBALD MACLEOD
- 1934 *Collected Verse.* By ROBERT HILLYER
- 1935 *Bright Ambush.* By AUDREY WILSON MANN
- 1936 *Strange Holiness.* By ROBERT P. TRAM COFFIN
- 1937 *A Further Range.* By ROBERT FROST
- 1938 *Cold Morning Sky.* By MARYA ZATSEVSKA
- 1939 *Selected Poems.* By JOHN GOSWOLD FLETCHER
- 1940 *Collected Poems.* By MARK VAN DOY
- 1941 *Sunderland Capture.* By LEON BACON
- 1942 *The Dust Which Is God.* By WILLIAM ROSE BENET
- 1943 *A Witness Tree.* By ROBERT FROST
- 1944 *Western Star.* By STEPHEN VINCENT BENET
- 1945 *V-Letter and Other Poems.* By KENNETH SHAPIRO
- 1946 No award

Lord Weary's Castle. By ROBERT LOWELL
The Age of Anxiety. By W. H. AUDEN

Music

WILLIAM SCHUMAN (*Secular Cantata No. 2, A Free Song*)
HOWARD HANSON (*Symphony No. 4, Opus 34*)

1945 AARON COPLAND (*Appalachian Spring*)
1946 LEO SOWERBY (*The Canticle of the Sun*)
1947 CHARLES IVES (*Symphony No. 3*)
1948 WALTER PISTON (*Symphony No. 3*)

Special Award

1944 *Oklahoma!* By RICHARD RODGERS and OSCAR HAMMERSTEIN, 2ND

List of Academy Awards for Production, Acting, and Direction

Production

Wings, Paramount
Broadway Melody, M-G-M
All Quiet on the Western Front, Universal
Cimarron, RKO
Grand Hotel, M-G-M
Cavalcade, Fox
It Happened One Night, Columbia
Mutiny on the Bounty, M-G-M
The Great Ziegfeld, M-G-M
The Life of Emile Zola, Warner
You Can't Take It With You, Columbia
Gone With the Wind, Selznick
Rebecca, Selznick
How Green Was My Valley, 20th Century-Fox
Mrs. Miniver, M-G-M
Casablanca, Warner
Going My Way, Paramount
The Lost Weekend, Paramount
Best Years of Our Lives, M-G-M
Gentleman's Agreement, 20th Century-Fox

Direction

Frank Borzage } *Seventh Heaven* } joint
Lewis Milestone } *Two Arabian Nights* } awards
Frank Lloyd } *The Divine Lady*
Lewis Milestone } *All Quiet on the Western Front*
Norman Taurog } *Skipppy*
Frank Borzage } *Bad Girl*
Frank Lloyd } *Cavalcade*
Frank Capra } *It Happened One Night*
John Ford } *The Informer*
Frank Capra } *Mr. Deeds Goes to Town*
Leo McCarey } *The Awful Truth*
Frank Capra } *You Can't Take It With You*
Victor Fleming } *Gone With the Wind*
John Ford } *The Grapes of Wrath*
John Ford } *How Green Was My Valley*
William Wyler } *Mrs. Miniver*
Michael Curtiz } *Casablanca*
Leo McCarey } *Going My Way*
Billy Wilder } *The Lost Weekend*
William Wyler } *Best Years of Our Lives*
Elia Kazan } *Gentleman's Agreement*

Actress

Janet Gaynor } *Seventh Heaven*
Mary Pickford } *Coquette*
Norma Shearer } *Divorcee*
Marle Dressler } *Min and Bill*
Helen Hayes } *Sin of Madelon Claudet*
Katharine Hepburn } *Morning Glory*
Claudette Colbert } *It Happened One Night*
Bette Davis } *Dangerous*
Lulise Rainer } *The Great Ziegfeld*
Lulise Rainer } *The Good Earth*
Bette Davis } *Jezebel*
Violen Leigh } *Gone With the Wind*
Ginger Rogers } *Kitty Foyle*
Joan Fontaine } *Suspicion*
Greer Garson } *Mrs. Miniver*
Jennifer Jones } *Song of Bernadette*
Ingrid Bergman } *Gaslight*
Joan Crawford } *Mildred Pierce*
Olivia De Havilland } *To Each His Own*
Loretta Young } *The Farmer's Daughter*

Actor

Emil Jannings } *Way of All Flesh*
Warner Baxter } *In Old Arizona*
George Arliss } *Disraeli*
Lionel Barrymore } *Free Soul*
Fredric March } *Dr. Jekyll and Mr. Hyde*
Charles Laughton } *Priv. Life of Henry VIII*
Clark Gable } *It Happened One Night*
Victor McLaglen } *The Informer*
Paul Muni } *The Story of Louis Pasteur*
Spencer Tracy } *Captains Courageous*
Spencer Tracy } *Boys Town*
Robert Donat } *Goodbye, Mr. Chips*
James Stewart } *Philadelphia Story*
Gary Cooper } *Sergeant York*
James Cagney } *Yankee Doodle Dandy*
Paul Lukas } *Watch on the Rhine*
Bing Crosby } *Going My Way*
Ray Milland } *The Lost Weekend*
Fredric March } *Best Years of Our Lives*
Ronald Colman } *A Double Life*

Academy Awards—(cont.)

Actress (supporting role)			Actor (supporting role)	
1936	Gale Sondergaard	<i>Anthony Adverse</i>	Walter Brennan	<i>Come and Get It</i>
1937	Alice Brady	<i>In Old Chicago</i>	Joseph Schildkraut	<i>Life of Emile Zola</i>
1938	Fay Bainter	<i>Jezebel</i>	Walter Brennan	<i>Kentucky</i>
1939	Hattie McDaniel	<i>Gone With the Wind</i>	Thomas Mitchell	<i>Stage Coach</i>
1940	Jane Darwell	<i>The Grapes of Wrath</i>	Walter Brennan	<i>The Westerner</i>
1941	Mary Astor	<i>The Great Lie</i>	Donald Crisp	<i>How Green Was My Valley</i>
1942	Teresa Wright	<i>Mrs. Miniver</i>	Van Heflin	<i>Johnny Eager</i>
1943	Katina Paxinou	<i>For Whom the Bell Tolls</i>	Charles Coburn	<i>More the Merrier</i>
1944	Ethel Barrymore	<i>None But the Lonely Heart</i>	Barry Fitzgerald	<i>Going My Way</i>
1945	Anne Revere	<i>National Velvet</i>	James Dunn	<i>A Tree Grows in Brooklyn</i>
1946	Anne Baxter	<i>The Razor's Edge</i>	Harold Russell	<i>Best Years of Our Lives</i>
1947	Celeste Holm	<i>Gentleman's Agreement</i>	Edmund Gwenn	<i>Miracle on 34th Street</i>

Some Annual Literary Awards

(in which payment is made)

Anisfield-Wolf: offered by Edith Anisfield Wolf under sponsorship of Saturday Review of Literature, 25 W. 45 St., N. Y. 19, for best book or books of the preceding year on racial relations. Award of \$2,000 for one or more books is made in early spring each year.

Bancroft: offered by Columbia University Bookstore, 2960 Broadway, N. Y. 27, for books in the field of American history. Two awards of \$2,000 each are made in early spring.

Denyse Clalrouin: offered by same, c/o Macy Companies, 595 Madison Ave., N. Y. 22, for the year's best American translation of a French author's work, published in the U. S. Award of \$500 is made Dec. 10.

O. Henry Memorial Short Story: edited by Hershel Brickell who chooses the three best short stories by American authors published in American periodicals; special prize for first published story is made. Awards of \$300 for 1st; \$200 for 2nd, \$100 for 3rd and \$100 as special are made annually in late summer.

Pulitzer: offered by the Trustees of Columbia University to American authors for a distinguished novel, play, volume of history, biography, and verse; also

journalism prizes. Award of \$500 is made for each category for which nominations must be sent in by publishers before Feb. 1.

Herald Tribune Children's Spring Book Festival: offered by the newspaper at 230 W. 41 St., N. Y. 18, to the authors of books published during first six months of the year, judged best for children in older, middle and younger age groups. Award of \$200 is made in each category. Closing dates are May 9-15.

Sidney Howard Memorial: offered by the Playwrights' Company, 630 Fifth Ave., N. Y. 20, to a new American playwright whose works have been given on Broadway. Award of \$1,500 is given in the spring.

League to Support Poetry Prize: offered by the League at 327 W. 18th St., N. Y., for a poetry manuscript. Award, in the form of publication by Farrar, Straus & Co. is made in January.

Midwest Literary: offered by the Friends of American Writers Foundation, Mrs. W. J. Barga, 922 N. Sheridan Rd., Waukegan Ill., to author who is a resident of the Middle West or who has written a book of fiction or non-fiction concerning the Middle West. \$750 award in March.

Nobel Prize

When the Swedish scientist Arrhenius submitted his thesis on electricity for a doctor's degree, it was given the lowest grade that could be granted without refusing the thesis. Nineteen years later he won the Nobel Prize for the same thesis.

The Nobel Award is offered annually by the Swedish Academy, Stockholm, for high achievement in the field of literature. The amount is approximately \$40,000 and it is usually announced on December 1 of each year.

SCIENCE



MEASURES AND WEIGHTS

UNITS OF LENGTH

Metric System

The meter was originally intended to be ten-millionth of the earth's quadrant, quadrant being one-quarter of a circumference. However, because of the difficulty of determining such a length with accuracy, this definition was abandoned. The meter is now considered to be the distance between two microscopic marks on the International Prototype Meter, a platinum-iridium bar, kept by the International Bureau of Weights and Measures at Sèvres, France, a suburb of Paris.

In 1927, the International Conference on Weights and Measures adopted a secondary definition of the meter in terms of light waves. According to this definition, one meter is equivalent to 1,553,164.13 wavelengths of the red light from cadmium.

Unit	Comparison	English equivalent
meter (mm)	.001 meter	.0394 inch
meter (cm)	.01 meter	.3937 inch
meter (dm)	.1 meter	3.937 inches
meter (m)		3.2808 feet
meter (dkm)	10 meters	32.8083 feet
meter (hm)	100 meters	328.0833 feet
meter (km)	1000 meters	.62137 mile

English System

According to legend, the yard was established by Henry I as the distance from the point of his nose to the end of his thumb when his arm was outstretched. The British Imperial Yard was defined in 1878 by the Weights and Measures Act as the distance at 62°F between two fine lines on gold studs sunk in a bronze bar known as the "No. 1 Standard Yard." This is equivalent to .914399 meter. In the United States, the yard is defined in terms of the meter, using as a standard the U. S. Prototype Meter. According to this definition, the yard is 3600/3937 (or .914402) meter, slightly longer than the British Imperial Yard.

Unit	Comparison	Metric equivalent
Inch (in.)		25.4001 millimeters
Foot (ft)	12 inches	.3048 meter
Yard (yd)	36 inches 3 feet	.9144 meter
Rod (rd)	16½ feet 5½ yards	5.0292 meters
Furlong (fur.)	660 feet 220 yards	201.1684 meters
Mile (mi) *	40 rods 5280 feet 1760 yards 320 rods 8 furlongs	1.6093 kilometers

*Known as statute mile. See nautical mile under Miscellaneous Units.

UNITS OF AREA

Metric System

Unit	Comparison	English equivalent
square millimeter (mm²)	.000001 m²	.0015 sq in.
square centimeter (cm²)	.0001 m²	.155 sq in.
square decimeter (dm²)	.01 m²	15.5 sq in.
square meter (m²) *		10.7639 sq ft
square dekameter (dkm²) †	100 m²	3.9537 sq rd
square hectometer (hm²) ‡	10,000 m²	2.471 acres
square kilometer (km²)	1,000,000 m²	.3861 sq mi

*Also known as a centare (ca).

†Also known as an are (a).

‡Also known as a hectare (ha).

English System

Unit	Comparison	Metric equivalent
Square inch (sq in.)		6.4516 cm²
Square foot (sq ft)	144 sq in.	.0929 m²
Square yard (sq yd)	1296 sq in. 9 sq ft	.8361 m²
Square rod (sq rd)	272¼ sq ft 30¼ sq yds	25.293 m²
Acre	43,560 sq ft 4,840 sq yd 160 sq rd	.4047 ha
Square mile (sq mi)	27,878,400 sq ft 3,097,600 sq yd 102,400 sq rd 640 acres	2.5900 km²

UNITS OF VOLUME

Metric System

Unit	Comparison	English equivalent
cubic millimeter (mm³)	.000000001 m³	.00006 cu in.
cubic centimeter (cm³)	.000001 m³	.061 cu in.
cubic decimeter (dm³)	.001 m³	61.0234 cu in.
cubic meter (m³) *		35.3145 cu ft

*Also known as a stère (s).

English System

Unit	Comparison	Metric equivalent
Cubic inch (cu in.)		16.3872 cm³
Cubic foot (cu ft)	1728 cu in.	.0283 m³
Cubic yard (cu yd)	46,656 cu in. 27 cu ft	.7646 m³
Cord (cd)	128 cu ft	3.6246 m³

UNITS OF WEIGHT OR MASS

The term *mass* denotes the amount of matter contained in an object, while the term *weight* denotes the gravitational pull of the earth on the object. For practical purposes, the two terms are synonymous.

Metric System

The gram was originally intended to be equal to the mass of one cubic centimeter of pure water at 4°C. However, because of

the difficulty of making exact measurement, a small error was made; and it has since been found that a kilogram of pure water occupies 1.000028 cubic decimeters. The standard for the kilogram is a platinum-iridium cylinder, called the International Prototype Kilogram, which is kept at the International Bureau of Weights and Measures in France.

Unit	Comparison	Avdp.	English equivalents Troy	Apoth.
Milligram (mg)	.001 gram	.0154 grain	.0154 grain	.0154 grain
Centigram (cg)	.01 gram	.1543 grain	.1543 grain *	.1543 grain
Decigram (dg)	.1 gram	1.5432 grains	1.5432 grains	1.5432 grains
Gram (g)		.0353 ounce	.0322 ounce	.0322 ounce
Dekagram (dkg)	10 grams	.3527 ounce	.3215 ounce	.3215 ounce
Hectogram (hg)	100 grams	3.5274 ounces	3.2151 ounces	3.2151 ounces
Kilogram (kg)	1000 grams	2.2046 pounds	2.6792 pounds	2.6792 pounds
Metric ton (t)	1000 kg	1.1023 tons *		

*Short tons. A metric ton is equivalent to .9842 long ton.

English System

The English System is complicated by the existence of three different kinds of weight: *avoirdupois weight*, used for common purposes; *troy weight*, used for weighing gold, silver, etc.; and *apothecaries weight*, used for making up medical prescriptions.

The British Imperial Pound (avoirdupois) is defined as the mass of a pure plat-

inum cylinder kept by the Standards Department of the Board of Trade. In the United States, the pound (avoirdupois) is defined in terms of the kilogram, using as a standard the U. S. Prototype Kilogram. According to this definition, the pound is equal to .4535924277 kilogram, making it infinitesimally smaller than the British Imperial Pound.

Avoirdupois Weight

Unit	Comparison	Metric equivalent
Grain		.0648 gram
Dram (dr avdp)	27.3438 grains	1.7718 grams
Ounce (oz avdp)	16 drams	28.3495 grams
	437.5 grains	
Pound (lb avdp)	7000 grains	.4536 kilogram
	256 drams	
	16 ounces	
Hundredweight (cwt) *	100 pounds	45.3592 kilograms
Ton (tn) †	2000 pounds	.9072 metric ton

*Known as the short hundredweight, which is in use in the United States and Canada. Great Britain uses the long hundredweight (112 lb or 50.8024 kg).

†Known as the short ton, which is in use in the United States and Canada. Great Britain uses the long ton (2240 lb or 1.01605 metric tons).

Troy Weight

Unit	Comparison	Metric equivalent
Grain		.0648 gram
Pennyweight (dwt)	24 grains	1.5552 grams
Ounce (oz t)	480 grains	31.1035 grams
	20 pennyweights	
Pound (lb t) *	5760 grains	.3732 kilogram
	240 pennyweights	
*Declared illegal in Great Britain.		
	12 ounces	

Apothecaries Weight

Unit	Comparison	Metric equivalent
Grain		.0648 gram
Scruple (s ap or ℥)	20 grains	1.296 grams
Dram (dr ap or ℥)	60 grains	3.8879 grams
	3 scruples	
Ounce (oz ap or ℥)	480 grains	31.1035 grams
	24 scruples	
	8 drams	
Pound (lb ap)	5760 grains	.3732 kilogram
	288 scruples	
	96 drams	
	12 ounces	

UNITS OF CAPACITY

Metric System

The liter is a secondary unit of capacity defined as the volume occupied by one kilogram of pure water at 4°C. It was intended that the liter should exactly equal one cubic decimeter, but as an error was made in measurement, has since been found to equal 1.000028 cubic decimeters.

Unit	Comparison	English equivalents Liquid	Dry
Milliliter (ml)	.001 liter	.0338 fl oz	.0018 pt
Centiliter (cl)	.01 liter	.3381 fl oz	.0182 pt
Deciliter (dl)	.1 liter	3.3815 fl oz	.1816 pt
Liter (l)		1.0567 qt	.9081 qt
Dekaliter (dkl)	10 liters	2.6418 gal	1.1351 p
Hectoliter (hl)	100 liters	26.4178 gal	2.8378 bu

English System

In Great Britain, the standard unit of capacity for measuring both liquid and dry commodities is the British Imperial Gallon. It is defined as the volume of ten pounds of pure water at 62°F and contains 277.418 cubic inches. The bushel is defined as eight gallons (2218.192 cubic inches).

In the United States, there are two separate standards. The unit for measuring liquids is the gallon, which is defined as 231 cubic inches; the unit for measuring dry commodities is the bushel, which is defined as 2150.42 cubic inches.

Liquid Measure (U. S.)

Unit	Comparison	Cubic inches	Metric equivalent
Minim (min or m) *		.0038	.0616 ml
Fluid dram (fl dr)	60 min	.2256	3.6966 ml
Fluid ounce (fl oz)	8 fl dr	1.8047	29.5729 ml
Gill (gi)	32 fl dr	7.2188	118.292 ml
	4 fl oz		
Pint (pt)	16 fl oz	28.875	.4732 liter
	4 gi		
Quart (qt)	32 fl oz	57.75	.9463 liter
	8 gi		
	2 pt		
Gallon (gal)	32 gi	231	3.7853 liters
	8 pt		
	4 qt		

*Approximately one drop.

UNITS OF CIRCULAR MEASURE

Unit	Comparison
Second (")	
Minute (')	60 seconds
Degree (°)	60 minutes
Right angle	90 degrees
Straight angle	180 degrees
Circle	360 degrees

Dry Measure (U. S.)

Unit	Comparison	Cubic inches	Metric equivalent
Pint (pt)		33.6003	.5506 liter
Quart (qt)	2 pints	67.2006	1.1012 liters
Peck (pk)	16 pints	537.605	8.8096 liters
	8 quarts		
Bushel (bu)	64 pints	2150.42	35.2383 liters
	32 quarts		
	4 pecks		

COMMON FORMULAS

Circumference

Circle: $C = \pi d$, in which π is 3.1416 and d the diameter.

Area

Triangle: $A = \frac{ab}{2}$, in which a is the base and b the height.

Square: $A = a^2$, in which a is one of the sides.

Rectangle: $A = ab$, in which a is the base and b the height.

Trapezoid: $A = \frac{h(a+b)}{2}$, in which h is the height, a the longer parallel side, and b the shorter.

Regular pentagon: $A = 1.720a^2$, in which a is one of the sides.

Regular hexagon: $A = 2.598a^2$, in which a is one of the sides.

Regular octagon: $A = 4.828a^2$, in which a is one of the sides.

Circle: $A = \pi r^2$, in which π is 3.1416 and r the radius.

Volume

Cube: $V = a^3$, in which a is one of the edges.

Rectangular prism: $V = abc$, in which a is the length, b the width, and c the depth.

Pyramid: $V = \frac{Ah}{3}$, in which A is the area of the base and h the height.

Cylinder: $V = \pi r^2 h$, in which π is 3.1416, r the radius of the base, and h the height.

Cone: $V = \frac{\pi r^2 h}{3}$, in which π is 3.1416, r the radius of the base, and h the height.

Sphere: $V = \frac{4\pi r^3}{3}$, in which π is 3.1416 and r the radius.

Miscellaneous

Speed per second acquired by falling body: $v = 32t$, in which t is the time in seconds.

Distance in feet traveled by falling body: $d = 16t^2$, in which t is the time in seconds.

Speed of sound in feet per second through any given temperature of air:

$V = \frac{1087\sqrt{273+t}}{16.52}$, in which t is the temperature Centigrade.

Cost per hour of operation of electrical device: $C = \frac{Wtc}{1000}$, in which W is the number of watts, t the time in hours, and c the cost per kilowatt-hour.

Conversion of matter into energy (Einstein's Theorem): $E = mc^2$, in which E is the energy in ergs, m the mass of the matter in grams, and c the speed of light in centimeters per second. ($c^2 = 9 \cdot 10^{20}$).

Abbreviations

The National Bureau of Standards recommends that the period be omitted after all abbreviations of units unless the

abbreviation forms an English word, and that the same abbreviation be used for both singular and plural.

FAHRENHEIT AND CENTIGRADE SCALES

Zero on the Fahrenheit scale represents the temperature produced by the mixing of equal weights of snow and common salt.

Absolute zero is theoretically the lowest possible temperature, the point at which all molecular motion would cease.

	F	C	
Boiling point of water	212°	100°	To convert Fahrenheit to Centigrade, subtract 32 and multiply by 5/9.
Freezing point of water	32°	0°	To convert Centigrade to Fahrenheit, multiply by 9/5 and add 32.
Absolute zero	-459.6°	-273.1°	

ROMAN NUMERALS

Roman numerals are expressed by letters of the alphabet and are rarely used today except for formality or variety.

There are three basic principles for reading Roman numerals:

- 1. A letter repeated once or twice repeats its value that many times. (XXX=30, CC=200, etc.).
- 2. One or more letters placed after another letter of greater value increases the greater value by the amount of the smaller. (VI=6, LXX=70, MCC=1200, etc.).
- 3. A letter placed before another letter of greater value decreases the greater value by the amount of the smaller. (IV=4, XC=90, CM=900, etc.).

Letter	Value	Letter	Value
I	1	LX	60
II	2	LXX	70
III	3	LXXX	80
IV	4	XC	90
V	5	C	100
VI	6	D	500
VII	7	M	1,000
VIII	8	\overline{V}	5,000
IX	9	\overline{X}	10,000
X	10	\overline{L}	50,000
XX	20	\overline{C}	100,000
XXX	30	\overline{D}	500,000
XL	40	\overline{M}	1,000,000
L	50		

SIMPLE INTEREST FOR \$100

To find the interest for any amount of money, move the decimal point of that amount two places to the left and multiply by the figure obtained from the table.

For figuring simple interest, the year is considered to have 360 days.

	1 Day	7 Days	1 Month	3 Months	6 Months	1 Year
2%	\$.00556	\$.03889	\$.16667	\$.50000	\$1.00000	\$2.00000
2½%	.00694	.04861	.20833	.62500	1.25000	2.50000
3%	.00833	.05833	.25000	.75000	1.50000	3.00000
3½%	.00972	.06806	.29167	.87500	1.75000	3.50000
4%	.01111	.07778	.33333	1.00000	2.00000	4.00000
4½%	.01250	.08750	.37500	1.12500	2.25000	4.50000
5%	.01389	.09722	.41667	1.25000	2.50000	5.00000
5½%	.01528	.10694	.45833	1.37500	2.75000	5.50000
6%	.01667	.11667	.50000	1.50000	3.00000	6.00000
6½%	.01806	.12639	.54167	1.62500	3.25000	6.50000
7%	.01944	.13611	.58333	1.75000	3.50000	7.00000
8%	.02222	.15556	.66667	2.00000	4.00000	8.00000
9%	.02500	.17500	.75000	2.25000	4.50000	9.00000
10%	.02778	.19444	.83333	2.50000	5.00000	10.00000

MISCELLANEOUS UNITS

- AGATE: Originally a measurement of type size (5½ points). Now equal to 1/14 inch. Used in printing for measuring column length.
- ANGSTROM (A or λ): .0001 micron or .0000001 mm. Used for measuring length of light waves.
- ASTRONOMICAL UNIT (A.U.): 93,003,000 miles, the average distance of the earth from the sun. Used in astronomy.
- BALE: A large bundle of goods. In the U. S., the approximate weight of a bale of cotton is 500 pounds. The weight varies in other countries.

B (bbl): For liquids, $31\frac{1}{2}$ gallons or 231 cubic inches. For dry commodities except cranberries: 105 dry quarts or 26.25 cubic inches. For cranberries: 5 cubic inches.

FOOT (fbm): 144 cubic inches or 12 in. x 12 in. x 1 in.). Used for lumber. 40 yards. Used for measuring cloth.

About 100 fathoms or 600 feet. For measuring lengths of cable.

(c): 200 milligrams or 3.086 grains. Originally the weight of a seed of carob tree in the Mediterranean region. Used for weighing precious stones. A measure of the purity of gold indicating how many parts out of 100 are pure. Eighteen carat gold, for example, is $\frac{3}{4}$ pure.

(ch): a chain 66 feet or one-tenth of a furlong in length, divided into 100 links called links. One mile is equal to 80 chains. Used in surveying and sometimes called Gunter's chain.

18 inches or 45.72 cm. Derived from the distance between elbow and tip of the finger.

ENGLISH: $1\frac{1}{4}$ yards or $\frac{1}{2}$ bolt. Used for measuring cloth.

F (fath): 6 feet or 1.8288 m. Derived from the distance to which a man can stretch his arms. Used for measuring depths and depths of water.

NET TON (also called **MEASURE-TON**): 40 cubic feet of merchandise. Used for cargo freight.

GROSS: 12 gross or 1728.

: 12 dozen or 144.

4 inches or 10.16 cm. Derived from the width of the hand. Used for measuring the height of horses at withers.

HEAD (hhd): 2 liquid barrels or 5.1 cubic inches.

POWER: The power needed to lift 550 pounds a distance of one foot in one minute (about $1\frac{1}{2}$ times the power an average horse can exert). Used for rating the power of steam engines.

Not a distance, but the rate of travel of one nautical mile per hour. Used for measuring speed of ships.

E: Rather indefinite and varying in length, but usually estimated at 3 miles in English-speaking countries.

YEAR: 5,880,000,000,000 miles, the distance light travels in a year at the rate of 186,273 miles per second. (If an astronomical unit were represented by one inch, a light-year would be represented by about one mile.) Used for measurements in interstellar space.

One-hundredth of a chain or 7.92 inches. Used in surveying.

M: Two-quart bottle. Used for measuring wine, etc.

MICRON (μ): .001 millimeter. Used for scientific measurements.

MIL: .001 inch. Used for measuring size of wire. The area of a cross-section of wire is usually expressed in circular mils, a circular mil being the area of a circle one mil in diameter. A wire one inch in diameter has a cross-section area of one million circular mils.

MILLIMICRON ($m\mu$): .001 micron or .000001 mm. Used for scientific measurements.

NAUTICAL MILE (also called **GEOGRAPHICAL** or **SEA MILE**): Equal to a minute or $1/21600$ of a great circle of the earth. Length varies in different countries. In Great Britain, it is 6080 feet or 1853.2 meters, and in the United States, it is 6080.2 feet or 1853.248 meters. The International Hydrographic Bureau proposed in 1929 a length of 1852 meters or 6,076.097 feet, which has been adopted by several countries.

PARSEC: Approximately 3.26 light-years or 19.2 trillion miles. Term is combination of first syllables of *parallax* and *second*, and distance is that of imaginary star when lines drawn from it to both earth and sun form a maximum angle or parallax of one second ($1/3600$ degree). Used for measuring interstellar distances.

PI (π): 3.14159265+. The ratio of the circumference of a circle to its diameter. For practical purpose, the value is used to four decimal places: 3.1416.

PICA: $\frac{1}{6}$ inch or 12 points. Used in printing for measuring column width, etc.

PIPE: 2 hogsheads. Used for measuring wine and other liquids.

POINT: .013837 (approximately $1/72$) inch or $1/12$ pica. Used in printing for measuring type size.

QUINTAL: 100,000 grams or 220.46 pounds avoirdupois.

QUIRE: Used for measuring paper. Sometimes 24 sheets but more often 25. There are 20 quires in a ream.

REAM: Used for measuring paper. Sometimes 480 sheets, but more often 500 sheets.

SCORE: 20 units.

SPAN: 9 inches or 22.86 cm. Derived from the distance between the end of the thumb and the end of the little finger when both are outstretched.

STONE: Legally 14 pounds avoirdupois in Great Britain.

TOWNSHIP: U. S. land measurement of almost 36 square miles. The south border is 6 miles long. The east and west borders, also 6 miles long, follow the meridians, making the north border slightly less than six miles long. Used in surveying.

TUN: 252 gallons, but often larger. Used for measuring wine and other liquids.

DECIMAL EQUIVALENTS OF COMMON FRACTIONS

$\frac{1}{2}$.5000	$\frac{1}{32}$.0313	$\frac{3}{4}$.7500	$\frac{1}{16}$.0625
$\frac{1}{4}$.3333	$\frac{1}{8}$.1250	$\frac{1}{2}$.5000	$\frac{1}{8}$.1250
$\frac{1}{8}$.1250	$\frac{1}{4}$.2500	$\frac{1}{4}$.2500	$\frac{1}{4}$.2500
$\frac{1}{16}$.0625	$\frac{1}{16}$.0625	$\frac{1}{8}$.1250	$\frac{1}{8}$.1250
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$\frac{1}{1180591620717411303424}$.0000	$\frac{1}{1180591620717411303424}$.0000	$\frac{1}{590295810358705651712}$.0000	$\frac{1}{590295810358705651712}$.0000
$\frac{1}{2361183241434822606848}$.0000	$\frac{1}{2361183241434822606848}$.0000	$\frac{1}{1180591620717411303424}$.0000	$\frac{1}{1180591620717411303424}$.0000
$\frac{1}{4722366482869645213696}$.0000	$\frac{1}{4722366482869645213696}$.0000	$\frac{1}{2361183241434822606848}$.0000	$\frac{1}{2361183241434822606848}$.0000
$\frac{1}{9444732965739290427392}$.0000	$\frac{1}{9444732965739290427392}$.0000	$\frac{1}{4722366482869645213696}$.0000	$\frac{1}{4722366482869645213696}$.0000
$\frac{1}{18889465931478580854784}$.0000	$\frac{1}{18889465931478580854784}$.0000	$\frac{1}{9444732965739290427392}$.0000	$\frac{1}{9444732965739290427392}$.0000
$\frac{1}{37778931862957161709568}$.0000	$\frac{1}{37778931862957161709568}$.0000	$\frac{1}{18889465931478580854784}$.0000	$\frac{1}{18889465931478580854784}$.0000
$\frac{1}{75557863725914323419136}$.0000	$\frac{1}{75557863725914323419136}$.0000	$\frac{1}{37778931862957161709568}$.0000	$\frac{1}{37778931862957161709568}$.0000
$\frac{1}{151115727451828646838272}$.0000	$\frac{1}{151115727451828646838272}$.0000	$\frac{1}{75557863725914323419136}$.0000	$\frac{1}{75557863725914323419136}$.0000
$\frac{1}{302231454903657293676544}$.0000	$\frac{1}{302231454903657293676544}$.0000	$\frac{1}{151115727451828646838272}$.0000	$\frac{1}{151115727451828646838272}$.0000
$\frac{1}{604462909807314587353088}$.0000	$\frac{1}{604462909807314587353088}$.0000	$\frac{1}{302231454903657293676544}$.0000	$\frac{1}{302231454903657293676544}$.0000
$\frac{1}{1208925819614629174706176}$.0000	$\frac{1}{1208925819614629174706176}$.0000	$\frac{1}{604462909807314587353088}$.0000	$\frac{1}{604462909807314587353088}$.0000
$\frac{1}{2417851639229258349412352}$.0000	$\frac{1}{2417851639229258349412352}$.0000	$\frac{1}{1208925819614629174706176}$.0000	$\frac{1}{1208925819614629174706176}$.0000
$\frac{1}{4835703278458516698824704}$.0000	$\frac{1}{4835703278458516698824704}$.0000	$\frac{1}{2417851639229258349412352}$.0000	$\frac{1}{2417851639229258349412352}$.0000
$\frac{1}{9671406556917033397649408}$.0000	$\frac{1}{9671406556917033397649408}$.0000	$\frac{1}{4835703278458516698824704}$.0000	$\frac{1}{4835703278458516698824704}$.0000
$\frac{1}{19342813113834066795298816}$.0000	$\frac{1}{19342813113834066795298816}$.0000	$\frac{1}{9671406556917033397$			

Calories and Vitamins of Selected Foods

(per pound, as purchased)

Source: U. S. Dept. of Agriculture Misc. Publication No. 572.

Food	Energy, calories	Vitamin A, Int. Units	Thiamine, mg.	Riboflavin, mg.	Niacin, mg.	Ascorbic acid, mg.
Apples	258	360	.15	.08	1.0	18
Beef, medium fat, sliced	2,840	(0)	(1.91)	(.47)	(9.4)	0
Bananas	299	1,300	.27	.19	1.7	29
Beans, snap	172	2,560	.32	.41	2.5	79
Beef, roasting, boned	874	(0)	.53	.68	23.2	0
Butter	155	80	.11	.17	1.4	34
Bread, rye, light	1,194	(0)	.71	(.18)	(5.0)	0
Bread, white, enriched	1,186	(0)	(1.10)	(.70)	(10.0)	0
Bread, wholewheat	1,187	(0)	1.28	.70	16.1	0
Butter	3,327	15,000 ¹	.01	.05	.5	0
Buttermilk, cultured	161	(20)	(.16)	(.81)	(.5)	(6)
Cabbage	95	270	.23	.21	.9	173
Carrots	179	48,000	.27	.26	2.0	24
Cheese, cheddar type	1,784	7,920	.20	2.29	(.9)	(0)
Cheese, cottage	459	(150)	.08	1.32	(.5)	(0)
Chicken, roasters, dressed ²	538	trace	.31	.49	23.8	...
Chocolate, unsweetened	2,589	(0)	...	1.09	5.0	(0)
Corn, sweet, white or yellow	186	680 ³	.27	.24	2.4	20
Crackers, graham	1,903	(0)	1.36	.54	6.8	0
Cream (20%)	943	(3,750)	(.14)	(.64)	(.4)	(5)
Custard, whole, fresh	636	4,590	.47	1.35	.3	(0)
Corn, wheat, patent	1,611	(0)	.30	.15	3.5	0
Dried fruit	133	(70)	.11	.06	.6	121
Eggs, fresh	1,514	(0)	3.08	.76	15.1	0
Hamburger	1,433	(0)	.45	.57	19.6	0
Ham	1,449	(0)	.02	.17	1.0	16
Ham, leg roast	866	(0)	.80	1.00	22.4	0
Hot dogs	123	0	.13	.01	.4	127
Ice cream, fresh	597	87,000	1.23	12.73	73.0	140
Macaroni; spaghetti	1,636	(0)	.59	.36	9.5	0
Margarine (Vitamin A added)	3,327	(9,000)	(.00)	(.00)	(.0)	0
Milk, fresh whole	312	(720)	.16	.78	.5	6
Milk, canned	1,090	(0)	.36	.72	12.9	(0)
Milk, whole	1,799	(0)	2.49	.63	5.2	0
Milk, skimmed	164	(620)	.25	.08	.8	162
Milk, fresh	225	...	.84	1.04	5.7	...
Milk, condensed	204	3,530	.08	.19	3.6	31
Nut butter	2,808	0	.89	.72	73.5	(0)
Nuts, roasted	1,961	0	.96 ⁴	.52	53.0	(0)
Onions, green	206	1,390	.72	.37	4.2	54
Onions	242	1,510	.63	(.13)	2.4	20
Pork, loin	1,070	(0)	3.81	.75	16.3	0
Potatoes, sweet	488	30,030 ⁵	.37	.23	2.8	86
Potatoes, white	325	70	.40	.15	4.4	64
Peanut butter	1,153	7,300	.38	.64	6.6	11
Peanut oil, unsulfured	1,355	230	.69	.37	2.2	trace
Peanut oil, sulfured	1,593	(0)	.24	.12	6.3	0
Pork, white	789	(0)	.48	.61	21.0	0
Pork, canned	766	370 ⁶	.15	.80	29.6	0
Peanut oil, canned in oil	768	1,080	.21	.43	19.4	0
Peanut oil, canned	1,271	(0)	.86	.94	12.8	0
Peanut oil, each	92	35,040	.44	.90	2.6	219
Peanut oil, granulated or powdered	1,807	(0)	(.00)	(.00)	(.0)	0
Potatoes	91	4,380	.24	.16	2.5	93
Peanut oil, medium fat, dressed ²	797	trace	.38	.58	24.0	...
Peanut oil, chips	136	20	.26	.24	1.8	113
Peanut oil, cutlet, boneless	723	(0)	.80	1.25	29.2	0

... round average. ²Vitamin values based on muscle meat only. ³Based on yellow corn; white corn contains only a trace. ⁴Based on peanuts without skins; when skins are included, thiamine value is higher. ⁵If varieties only were used, value would be much lower. ⁶Based on pink salmon; canned red salmon may have a value several times higher.

TE: Parentheses are used to denote values imputed usually from some other form of the same food or similar foods. The sign ... indicates that no reliable data are available.

Chemical Elements

Source: Professor Philip S. Chen, Atlantic Union College.

Atomic number	Element	Symbol	Atomic weight 1947	Density gm/cc	Melting point °C.	Boiling point °C.	Valence*	Number of isotopes†	Discoverer	Date dis- covered
1	Hydrogen	H	1.0080	0.07†	-259.1 ₄	-252.7	1	2-3	Cavendish	1766
2	Helium	He	4.003	0.15†	<-272.2	-268.9	0	2	Ramsay	1895
3	Lithium	Li	6.940	0.534	186.	>1200.	1	2	Arfvedson	1817
4	Beryllium (Glucinum)	Be	9.02	1.84	1350.	1500.	2	1	Vauquelin	1798
5	Boron	B	10.82	2.535§	2300.	2500.	3	2	Gay-Lussac and Thenard; Davy	1808
6	Carbon	C	12.010	2.25**	>3500.	4200.	2, 3 or 4	2	Prehistoric	....
7	Nitrogen	N	14.008	0.810†	-209.8 ₄	-195.3	3 or 5	2	Rutherford	1772
8	Oxygen	O	16.0000	1.14†	-218.4	-183.00	2	3	Priestley	1774
9	Fluorine	F	19.00	1.14†	-223.	-187.	1	1	Moissan	1886
10	Neon	Ne	20.183	0.90035 (g/10°C. 760mm)	-248.67	-245.9	0	3	Ramsay and Travers	1898
11	Sodium	Na	22.997	0.9287†	97.5	880.	1	1	Davy	1807
12	Magnesium	Mg	24.32	1.741	651.	1110.	2	3	Davy	1808
13	Aluminum	Al	26.97	2.699†	660.0	1800.	3	1	Wohler	1827
14	Silicon	Si	28.06	2.42**	1410.	2600.	4	3	Berzelius	1824
15	Phosphorus	P	30.98	1.83 (white)	44.1	280.	3 or 5	1	Brand	1669
16	Sulfur	S	32.066	2.0-1	112.8	444.6	2, 4 or 6	4	Prehistoric	....
17	Chlorine	Cl	35.457	1.507†	-101.6	-34.6	1, 3, 5 or 7	2	Scheele	1774
18	Argon	Ar	39.944	1.4233†	-189.2	-185.7	0	3	Rayleigh and Ramsay	1894
19	Potassium	K	39.096	0.87	62.3	760.	1	3	Davy	1807
20	Calcium	Ca	40.08	1.54	810.	1170.	2	6	Davy	1808
21	Scandium	Sc	45.10	3.62(10°C.)	1200.	2400.	3	1	Nilson	1879
22	Titanium	Ti	47.90	4.5	1800.	>3000.	3 or 4	5	Gregor	1791
23	Vanadium	V	50.95	5.69	1710.	3000.	2, 3, 4 or 5	1	Sefstrom	1830
24	Chromium	Cr	52.01	6.92	1615.	2200.	2, 3 or 6	4	Vauquelin	1798
25	Manganese	Mn	54.93	7.42	1260.	1900.	2, 3, 4, 6 or 7	1	Gahn	1774
26	Iron	Fe	55.85	7.85-88	1530.	3000.	2, 3 or 6	4	Prehistoric	....
27	Cobalt	Co	58.94	8.9	1480.	2900.	2 or 3	1	Brandt	1735
28	Nickel	Ni	58.69	8.60-90	1452.	2900.	2 or 3	5	Cronstedt	1751
29	Copper	Cu	63.54	8.30-95	1083.	2300.	1 or 2	2	Prehistoric	....
30	Zinc	Zn	65.38	7.04-16	419.4 ₄	907.	2	5	Marggraf	1746
31	Gallium	Ga	69.72	5.903	29.7 ₅	>1600.	2 or 3	2	Boisbaudran	1875
32	Germanium	Ge	72.60	5.46	958.5	2700.	4	5	Winkler	1886
33	Arsenic	As	74.91	5.73	814.28atm.	615.	3 or 5	1	Albertus Magnus	1250†
34	Selenium	Se	78.96	4.3-8	220.	688.	2, 4 or 6	6	Berzelius	1818
35	Bromine	Br	79.916	3.12†	-7.2	58.7 ₄	1, 3, 5 or 7	2	Balard	1826
36	Krypton	Kr	83.7	2.16†	-169.	-151.8	0	6	Ramsay and Travers	1898
37	Rubidium	Rb	85.48	1.532	38.5	700.	1	2	Bunsen and Kirchoff	1861
38	Strontium	Sr	87.63	2.50-58	800.	1150.	2	4	Davy	1808
39	Yttrium	Y	88.92	3.80	1490.	2400.	3	1	Gadolin	1794
40	Zirconium	Zr	91.22	6.44	1700.	>2400.	4	5	Klaproth	1789
41	Columbian	Cb	92.91	8.4	1900.	>3000.	3 or 5	1	Hatchett	1801
42	Molybdenum	Mo	95.95	9.01	2620±10	3700.	2, 3, 4, 5 or 6	7	Hjelm	1781
43	Technetium	Tc	98.	.....	2(300).	.....	2, 3, 4 or 6	..	Perrier and Segre	1937
44	Ruthenium	Ru	101.7	12.06	2400.	>2700.	3, 4, 6 or 8	7	Klaus	1844
45	Rhodium	Rh	102.91	12.44	1955.	>2400.	3	1	Wollaston	1803
46	Palladium	Pd	106.7	12.16 (20°C.)	1555.	2200.	2 or 4	6	Wollaston	1803
47	Silver	Ag	107.880	10.503††	960.5	1900.	1	2	Prehistoric	....
48	Cadmium	Cd	112.41	8.648	320.9	767.	2	8	Stromeyer	1817
49	Indium	In	114.76	7.28	155.	1400.	1 or 3	2	Reich and Richter	1863
50	Tin	Sn	118.70	7.29	231.8 ₃	2260.	2 or 4	10	Prehistoric	....
51	Antimony	Sb	121.76	6.618	630.5	1380.	3 or 5	2	Prehistoric	....
52	Tellurium	Te	127.61	6.25**	452.	1390.	2, 4, or 6	8	von Richenstein	1782
53	Iodine	I	126.92	4.94	113.5	184.3 ₅	1, 3, 5 or 7	1	Courtois	1811
54	Xenon	Xe	131.3	3.52†	-140.	-109.1	0	9	Ramsay and Travers	1898

Chemical Elements—(cont.)

Atomic number	Element	Symbol	Atomic weight 1947	Density gm./cc	Melting point °C.	Boiling point °C.	Valence*	Number of isotopes†	Discoverer	Date dis- covered
55	Cesium	Cs	132.91	1.873	26.	670.	1	1	Bunsen and Kirchhoff	1860
56	Barium	Ba	137.36	3.78	850.	1140.	2	7	Davy	1808
57	Lanthanum	La	138.92	6.5	820.	1800.	3	2	Mosander	1839
58	Cerium	Ce	140.13	6.9	640.	1400.	3 or 4	4	Klaproth; Berzelius and Hisinger	1803
59	Praseodymium	Pr	140.92	6.475	940.	.....	3, 4 or 5	1	Auer von Welsbach	1885
60	Neodymium	Nd	144.27	6.96	840.	.....	3	7	Auer von Welsbach	1885
61	Promethium	Pm	147.	.....	.....	.....	3	4	Marinsky and Glendenin	1945
62	Samarium	Sm	150.43	7.7-8	1300.	.....	2 or 3	7	Boisbaudran	1879
63	Europium	Eu	152.0	.....	.....	.....	2 or 3	2	Demarcay	1901
64	Gadolinium	Gd	156.9	.....	.....	.....	3	7	Marignac	1880
65	Terbium	Tb	159.2	.....	.....	.....	3	1	Mosander	1843
66	Dysprosium	Dy	162.46	.....	.....	.....	3	6	Boisbaudran	1886
67	Holmium	Ho	164.94	.....	.....	.....	3	1	Soret	1878
68	Erbium	Er	167.2	7.77 (?)	.....	.....	3	6	Mosander	1843
69	Thulium	Tm	169.4	.....	.....	.....	3	1	Cleve	1879
70	Ytterbium	Yb	173.04	.....	.....	.....	3	7	Marignac	1878
71	Lutecium	Lu	174.99	.....	.....	.....	3 or 4	2	Urbain	1907
72	Hafnium	Hf	178.6	13.3	1700.	3200.	4	6	Coster and von Hevesy	1923
73	Tantalum	Ta	180.88	16.6	2800.	4100.	3 or 5	1	Ekeberg	1802
74	Tungsten	W	182.92	18.6-19.1	3370.	5900.	2, 4, 5 or 6	5	d'Elhuyar	1783
75	Rhenium	Re	186.31	20.53 (20°C.)	3000.	.....	4	2	Noddack and Berg	1925
76	Osmium	Os	190.2	22.5	2700.	5300.	2, 3, 4 or 8	7	Tennant	1804
77	Iridium	Ir	193.1	22.42	2300.	4800.	3 or 4	2	Tennant	1804
78	Platinum	Pt	195.23	21.37	1755.	4300.	2 or 4	5	De Ulloa	1748
79	Gold	Au	197.2	19.3††	1063.0	2600.	1 or 3	1	Prehistoric	.....
80	Mercury	Hg	200.61	13.596†	-38.87	356.90	1 or 2	7	Prehistoric	.....
81	Thallium	Tl	204.39	11.86	303.5	1650.	1 or 3	2	Crookes	1861
82	Lead	Pb	207.21	11.347††	327.5	1620.	2 or 4	4	Prehistoric	.....
83	Bismuth	Bi	209.00	9.80	271.	1400.	3 or 5	4	Geoffroy	1753
84	Polonium	Po	210.0	.....	.....	.....	.....	7	Curie	1898
85	Astatine	At	211.	.....	470.	.....	1, 3, 5 or 7	2	Corson et al	1940
86	Radon	Rn	222.	9.739†	-71.	-61.8	0	3	Dorn	1900
87	Francium	Fa	223.	.....	20.	.....	1	1	Perey	1939
88	Radium	Ra	226.05	(5)	900.	1140.	2	4	Curie	1898
89	Actinium	Ac	231§§	.....	.....	.....	.....	2	Debiegne	1899
90	Thorium	Th	232.12	11.13	1800.	3000.	4	6	Berzelius	1828
91	Protoactinium	Pa	231.	.....	.....	.....	.....	2	Hahn and Meitner	1917
92	Uranium	U	238.07	18.7	1850.	.....	3, 4 or 6	3	Klaproth	1789
93	Neptunium	Np	239.	.....	.....	.....	3, 4, 5 or 6	6	McMillan and Abelson	1940
94	Plutonium	Pu	238.	.....	.....	.....	3, 4, 5 or 6	3	Seaborg et al	1940
95	Americium	Am	241.	.....	.....	.....	3	2	Seaborg et al	1944
96	Curium	Cm	242.	.....	.....	.....	3	2	Seaborg et al	1944

VALENCE is a measure of the extent to which an atom is able to combine directly with others.

ISOTOPES are one of two or more elements having same atomic number identical in chemical behavior. Because of their differences in mass, isotopes may be distinguished in the mass spectrophotograph and in band spectra. They become increasingly important in chemical observations and discoveries of new elements and properties.

Liquid. §Amorphous. ¶Graphite. **Crystalline. ††Compressed. ‡Cast. §§1939 atomic weight. ¶¶Exact date of birth—born 1193 and died 1280. < Is less than. > Is greater than.

Figures in parentheses are tentative or theoretical.

Note that the number of isotopes of each element is increasing by discovery or by manufacture.

PHYSICAL CHEMISTRY: Josiah Willard Gibbs (1839-1903), Professor of Mathematical Physics at Yale, by his formulation of the "Phase Rule" and his "On the Equilibrium of Heterogeneous Substances" founded physical chemistry.

ORGANIC CHEMISTRY: Although others had experimented in organic chemistry, the origin of this branch may be ascribed to Friedrich Wöhler who synthesized urea, an organic compound, from ammonium cyanate, an inorganic, in 1828.

SCIENTIFIC INVENTIONS AND DISCOVERIES

Source: *Encyclopaedia Britannica*.

DISCOVERIES AND INVENTIONS IN CHEMISTRY

- 1766—CAVENDISH. Discovery of "inflammable air" (hydrogen) as distinct substance and demonstration (1781) that it burned to form water.
- 1774—PRIESTLEY. Discovery of oxygen.
- 1783—LAVOISIER. First quantitative synthesis of water.
- 1803—DALTON. Atomic theory; laws of chemical combination.
- 1809—GAY-LUSSAC. Laws of gases.
- 1811—AVOGADRO. Molecular hypothesis.
- 1828—WÖHLER, LIEBIG. Synthesis of urea; foundation of organic chemistry.
- 1841—FARADAY. Induction of electric current.
- 1860—BUNSEN, KIRCHHOFF. Invention of the spectroscope.
- 1868—LOCKYER. Discovery of helium on the sun by use of spectroscope.
- 1869—MENDELEEV. Periodic table of elements, established families of elements.
- 1887—ARRHENIUS. Ionic theory of dissociation in solution.
- 1896—BECQUEREL. Radioactivity of uranium.
- 1899—CURIE. Discovery of radium.
- 1908—KAMERLINGH ONNES. Liquefaction of helium.
- 1912—LAUE, BRAGG. X-ray structures of crystals.
- 1913—MOSELEY. Atomic numbers.
- 1919—ASTON. Mass spectroscope for separation of isotopes.
- 1932—UREY. Discovery of deuterium.
- 1934—JOLIOT, CURIE. Artificial radioactivity.

INVENTIONS AND DISCOVERIES IN APPLIED CHEMISTRY

- 1650—GLAUBER. Manufacture of hydrochloric acid.
- 1839—GOODYEAR. Process for vulcanizing rubber.
- 1846—SCHÖNBEIN. Invention of gun cotton.
- 1856—BESSEMER. Air blast converter for manufacture of steel.
- 1858—HOFMANN. Discovered aniline in coal tar; aniline dyes.
- 1861—SOLVAY. Manufacture of soda from salt.
- 1862—NOBEL. Invention of dynamite.
- 1873—LINDE. Introduced ammonia refrigeration.
- 1886—HALL. Manufacture of aluminum by electrolytic action.
- 1891—FRASCH. Method for mining sulphur.
- 1908—BAKELAND. Phenol-formaldehyde resins (bakelite).
- 1913—HABER. Synthesis of ammonia from nitrogen and hydrogen.
- 1915—LANGMUIR. Tungsten filaments.
- 1923—MIDGLEY. Tetraethyl lead gasoline.
- 1930—CAROTHERS. Nylon plastic.
- 1930—IPATIEFF. High-octane gasoline.
- 1930—CAROTHERS and COLLINS. Neoprene, synthetic rubber.

DISCOVERIES AND INVENTIONS IN ELECTRICITY

- 1745—VON KLEIST. Leyden jar condenser.
- 1752—FRANKLIN. Lightning rod and the nature of lightning.
- 1791—GALVANI. Theory of animal electricity.
- 1800—VOLTA. Current electricity and electric battery.
- 1826—OHM. Laws of electrical resistance.
- 1828—HENRY. Electromagnetism and induction.
- 1831—FARADAY. Electromagnetic induction.
- 1832—MORSE. Electric telegraph perfected.
- 1832—GAUSS. System of absolute electric measurements.
- 1838—PAGE. Induction coil.
- 1870—GRAMME. First industrial dynamo.
- 1876—BELL. Telephone.
- 1878—CROOKES. Discovery of cathode ray.
- 1878—EDISON. First electric incandescent lamp.
- 1885—STANLEY. Electric transformer.
- 1892—TESLA. Alternating current motor.
- 1892—STEINMETZ. Laws of alternating current.
- 1895—ROENTGEN. Discovery of X-rays.
- 1896—MARCONI. Practical wireless.
- 1897—THOMSON. Isolation of the electron.
- 1904—FLEMING. First diode radio tube.
- 1907—DE FOREST. Triode radio tube.
- 1914—COOLIDGE. Tungsten filament lamp.
- 1925—BAIRD. Televisor, precursor of television.

MECHANICAL INVENTIONS AND DISCOVERIES

1440—GUTENBERG (?). Movable-type printing. (Gutenberg Bible published in 1456).
 1769—WATT. Steam engine patented.
 1803—MONTGOLFIER. Hot-air balloon.
 1845—CARTWRIGHT. Power loom.
 1867—FITCH. Steamboat.
 1893—WHITNEY. Cotton gin; mass production of interchangeable gun parts, 1798.
 1807—FULTON. First successful steamboat.
 1816—DAVY. Miner's safety lamp.
 1825—STEPHENSON. First successful steam railroad.
 1833—McCORMICK. Reaper.
 1835—COLT. Revolver.
 1837—ERICSSON. Screw propeller.

1846—HOE. Rotary printing press.
 1846—HOWE. Sewing machine.
 1852—OTIS. Improved power elevator.
 1858—FIELD. Successful Atlantic cable.
 1861—GATLING. Machine gun.
 1868—SHOLES, GLIDDEN. Typewriter.
 1869—WESTINGHOUSE. Air brake for railroads.
 1877—EDISON. Phonograph.
 1888—DUNLOP. Pneumatic tire.
 1893—EDISON. Motion pictures.
 1897—DIESEL. First successful heavy oil engine.
 1903—WRIGHT BROTHERS. Airplane.
 1905—SPERRY. Gyrocompass.
 1909—BRÉGUET. Helicopter.

DISCOVERIES AND INVENTIONS IN PHYSICS

1687—NEWTON. Law of gravity.
 1785—COULOMB. Fundamental laws of electrical attraction.
 1798—THOMPSON (Baron Rumford). Mechanical theory of heat.
 1815—FRESNEL. Diffraction of light.
 1840—JOULE. Measurements of electric current.
 1847—HELMHOLTZ. Law of conservation of energy.
 1873—MAXWELL. Electromagnetic theory of light.
 1896—BECQUEREL. Discovery of radioactivity.
 1897—WILSON. Development of cloud chamber to detect subatomic particles.
 1897—THOMSON. Discovery of electrons.
 1901—PLANCK. Quantum theory.

1902—MICHELSON. Velocity of light.
 1905—EINSTEIN. Special theory of relativity.
 1911—RUTHERFORD. Theory of atomic nucleus.
 1913—BOHR. Electron theory.
 1924—DE BROGLIE. Wave nature of the electrons.
 1931—LAWRENCE. Invention of the cyclotron.
 1932—CHADWICK. Discovery of the neutron.
 1932—ANDERSON. Discovery of the positron.
 1934—FERMI. Use of slow neutrons in atom smashing.
 1938—HAHN. Discovery of uranium fission.
 1941—FERMI, *et al.* Atomic pile for generation of power.

DISCOVERIES IN PHYSIOLOGY AND MEDICINE

1628—HARVEY. Circulation of blood and function of the heart.
 1665—LEEUEWENHOEK. Observation of bacteria by microscope.
 1757—LINNAEUS. System for classifying plants and animals.
 1766—JENNER. Vaccination for smallpox.
 1842—LONG. First to use ether as anesthetic in surgery. (Jackson, Morton, and Long disputed first use of ether.)
 1859—DARWIN. Evolution and theory of natural selection.
 1865—MENDEL. Laws of heredity.
 1867—LISTER. Antiseptic surgery.
 1882—PASTEUR. Rabies preventive.
 1882—KOCH. Tuberculosis bacteria discovered.

1894—ROUX. Perfection of diphtheria antitoxin.
 1901—TAKAMINE. Isolation of adrenaline, first hormone isolated.
 1905—BINET. Intelligence tests.
 1906—WASSERMANN, *et al.* Test for syphilis.
 1908—FREUD. Doctrine of psychoanalysis.
 1910—PAVLOV. Mechanism of the conditioned reflex.
 1913—SCHICK. Test of susceptibility to diphtheria.
 1913—MCCOLLUM. Isolation of vitamin A.
 1922—BANTIN, MACLEOD. Insulin for treatment of diabetes.
 1932—DOMAGK. Sulfa drugs as bactericides.
 1946—DU VIGNEAUD. Synthetic penicillin.

The Races of Mankind

by Professor Wilton Marion Krogman, Dept. of Anthropology, University of Pennsylvania

Classification of Man into groups called "races" rests upon the basic fact that all peoples belong to the same genus and species, *Homo sapiens*. This is important to keep in mind, for it implies that all peoples are much more alike than different.

Scientists classify Man by using a number of physical traits, most of them based upon observation rather than upon precise measurement. Examples of these are stature and head-form (determined by a breadth/length ratio), skin color, hair color, form and texture, eye color, nose shape, mouth form, shape of face with special reference to cheekbones. Other criteria, such as arm and leg proportions, are more specialized. Two things are noteworthy here: (1) most of the physical traits are external; (2) physical traits are so variable that a single trait has virtually no diagnostic value.

We may define a *race*, simply, as a subgroup of Mankind more or less set apart by a combination of physical traits.

There are three, possibly four, great aggregates of races, usually called *stocks*: Caucasoid, Mongoloid, Negroid, and Archaic Caucasoid (or Australoid). The first three are often referred to as "White," "Yellow," and "Black." This is not really correct; peoples of North-Central India are Caucasoids, yet their skin color is brown to dark brown; certain tribes of Northeast Africa are Negroids, yet their skin color is light brown to brown. Variability also may be seen in stature: the tallest people in the world are found in Denmark and the Scottish Highlands, in East Africa, and in southernmost South America—respectively Caucasoid, Negroid, and Mongoloid. It must be re-emphasized that not one or two traits, but an aggregate of traits, of genetic origin, provides the only valid method of setting up stock or racial classification.

Caucasoids are the peoples of Europe, the adjacent shores of North Africa, and of Asia Minor and the northern half of India. The following races belong to the Caucasoid stock: Nordic, or Northwest European, Alpine or Central European, Mediterranean or Southwest European, Baltic or Northeast European, Dinaric or Southeast European, Armenoid in western Asia Minor, and Indio (often called Hindu) in North-Central India. These races are not, of course, absolutely limited to those geographical areas. For example, the Mediterranean race is found also in North Africa, especially Egypt, and in Asia Minor, where it is represented by the Bedouin Arabs of Arabia. Other Caucasoid peoples are the Magyars, the Finns, and the Lapps, who show traces of Mongoloid mixtures, especially the last.

The Negroids are the peoples of Africa and Oceania, termed respectively the African Negroids and the Oceanic Negroids. The following African Negroid races are commonly recognized: Forest or West African or "True" Negro in West Africa, Sudanic in Central Africa, Nilotic in East Africa, Hamitic in Northeast and North Africa, Bantu (better: Bantu-speaking) in South Africa, and Bushman-Hottentot in the Kalahari Desert of South Africa. The Oceanic Negroids are commonly called Melanesian or Papuan, and are found chiefly in Borneo, New Caledonia, the Solomons, the Hebrides and Fiji.

Of special interest among Negroids are Pygmies, who average about four feet in stature. They are found in Africa in the Congo region, in the Ituri Forest, and in Oceania on the Andaman Islands, the Malay Peninsula, the Philippines, and Borneo.

The Mongoloids are basically the peoples of Asia, but are also in the Western Hemisphere as the American Indians, and are represented in Malaysia and in Oceania. The Mongoloids are usually divided into the following races: Sinic of China and Japan, Palearctic of Siberia, Turkic and Tungic or Mongolic of Central Asia, and Malayan of Malaysia. In the Western Hemisphere they are found as Eskimos and the Indians of the Americas. In Polynesia, i.e., in Samoa, Tonga, Hawaii and west to Easter Island, the Mongoloid stock is a basic element, with some Caucasoid and some Negroid (Melanesian?) admixture.

The Archaic Caucasoids are found in Australia as the Australian aborigines and in Japan as the Ainu. They may possibly be an element in Melanesia and in Ceylon and South India, e.g., the Toda, the Vedda, and other tribes.

This is a brief survey of the "stocks" and "races" of the world. There is much intermixing and some overlapping. This leads to two very important biological observations: (1) *there are no pure races*; (2) *there are no superior or inferior races*. We know from history that all peoples, upon contact, have crossed their genetically-based physical traits. We know from human anatomy that in fundamental structure all peoples are identical.

As far as biological Man is concerned, what he is, is related to his cultural environment, rather than to any innate (or inherited) ability or aptitude. There is no "German race," only a German nationality; there is no "Jewish race," only a Jewish socio-religious community; there is no "Aryan race," only an Aryan language; there is no "master race," only a political bombast!

RELIGION



Principal Religions of the World

Source: *Encyclopaedia Britannica*.

Statistics of the world's religions are rough approximations. This table is based on the most reliable latest data (1942 and 1943); it does not take into account mass deaths and dislocations resulting from World War II and from Hitler's "Judenrein" policy.)

Religion	North America	South America	Europe	Asia	Africa	Oceania	Total
Christian—Total	87,263,348	61,493,624	398,159,546	21,742,261	15,517,025	16,841,014	601,016,818
Roman Catholic	47,056,724	60,836,143	203,944,823	9,213,413	6,866,072	10,468,764	338,385,939
Eastern Orthodox	1,208,157		112,447,669	8,106,071	5,868,089		127,629,986
Protestant	38,998,467	657,481	81,767,054	4,422,777	2,782,864	6,372,250	135,000,893
Jewish*	4,409,712	226,958	9,372,666*	572,930	542,869	26,954	15,152,089*
Mohammedan	1,400		5,672,225	138,299,144	55,538,211	21,467,868	220,978,848
Hindu				100,000			100,000
Buddhist				25,000,000			25,000,000
Sikh	50,000			50,000,000			50,050,000
Confucianist	550,000			300,000,000			300,550,000
Jainist	180,000			150,000,000			150,180,000
Hindu	150,000			230,000,000			230,150,000
Primitive	50,000			45,000,000	76,301,961	100,000	121,451,961
Others or none	78,040,577	22,134,607	137,981,585	156,507,018		46,768,506	441,432,293
Grand Total	170,695,037	83,855,189	551,186,022	1,117,221,353	147,900,066	85,204,342	2,156,062,009

*The total number of Jews throughout the world at the beginning of 1948 was estimated at approximately 15,000,000. Practically the entire loss was in Europe (about 3,000,000 in Poland alone). It is estimated that 1,000,000 Jews escaped Nazi-dominated Europe.

History of Leading Religious Groups in the United States

Source: *Yearbook of American Churches and Christian Herald*.

(Religious bodies listed have memberships of 50,000 or over—50 Protestant bodies out of 223, and 8 non-Protestant bodies out of 30. Memberships shown are those published in the Aug., 1948, issue of *Christian Herald*, New York.)

Baptist

American Baptist Association.—A group of independent Missionary Baptist churches in the Southwest, organized into an association in 1905. They adhere strictly to the apostolic order of church polity and cooperation. Members: 245,861.

Free Will Baptists.—This is a body of Primitive Baptists centering in North Carolina, where the first church of this group was organized in 1727. Members: 255,127.

General Association of Regular Baptist Churches, North.—A fellowship of those seeking to maintain fundamental Baptist doctrine; ordinances of baptism and Lord's Supper observed. Members: 70,000.

National Baptist Convention, U.S.A., Inc. The older and parent convention of Negro Baptists. This body is to be distinguished from the National Baptist Convention of America, usually referred to as the "unincorporated" body. The "Incorporated" convention is a constituent member of the General Council of the Churches of Christ in America. Members: 4,122,315.

National Baptist Convention of America. This is a body usually referred to as the

"unincorporated" convention, not to be confused with the "Incorporated" National Baptist Convention, U.S.A., Inc., from which this body withdrew. Organized in 1895. Members: 2,580,921.

National Baptist Evangelical Life and Soul Saving Assembly of U.S.A.—Organized in 1921 by A. A. Banks, Sr., as a charitable, educational, and evangelical organization. Members: 70,843.

Northern Baptist Convention.—The early historical local independency of Baptist churches in America tended to impede the formation of any general organization until in 1814 a General Missionary Convention was formed to permit Baptists to express themselves in terms of missionary activities. In 1845, the state conventions in the South withdrew to organize the Southern Baptist Convention. In 1907, the Northern Baptist Convention was organized, a delegated body under whose direction the many agencies of the Baptists in the North and West now operate. Members: 1,541,991.

Primitive Baptists.—A large group of Baptists, largely through the South, who are opposed to all centralization, to modern missionary societies, and to Sunday schools. They are sometimes called "anti-missionary" Baptists. Members: 69,157.

Southern Baptist Convention.—In 1845, Southern Baptists withdrew from the General Missionary Convention over the ques-

tion of slavery and other matters and formed the Southern Baptist Convention. Members: 6,270,819.

The United American Free Will Baptist Church.—A body which set up its organization in 1901. Though ecclesiastically distinct, they are in close relations with the Free Will Baptists. Members: 75,000.

Catholic and Orthodox

Greek Orthodox Church (Hellenic).—Greek-speaking Orthodox Christians have had scattered parishes in the U. S. for the last seventy years. These were first under the jurisdiction of the Metropolitan of Athens and later under the Patriarchate of Constantinople. Political changes in Europe have been reflected in this country and have brought difficulties in all branches of the Orthodox Church. In 1931, a general convention held in New York City under the presidency of Archbishop Athenagoras brought a large measure of unity and order. Members: 300,000.

Polish National Catholic Church.—After a long period of dissatisfaction with Roman Catholic Administration in many Polish parishes, this group was organized in 1904. Members: 250,000.

The Roman Catholic Church.—The largest single group of Christians in the U. S., the Roman Catholic Church is under the spiritual leadership of Pope Pius XII. This group dates back to the priests who accompanied Columbus on his second voyage to the New World. A settlement, later dis-

own diocese and is under jurisdiction of the Serbian Patriarchate (Yugoslavia). Members: 75,000.

Lutheran

American Lutheran Church.—This Church is a constituent body of the American Lutheran Conference. It is itself the result of the merger in 1930 of the Evangelical Lutheran Joint Synod of Ohio and Other States (org. 1918), the Evangelical Lutheran Synod of Iowa and Other States (org. 1854), and the Lutheran Synod of Buffalo (org. 1845). Members: 646,700.

Evangelical Lutheran Augustana Synod of North America.—This group, whose constituency originally was of Swedish extraction, is a member of the American Lutheran Conference and is also a participating body in the National Lutheran Council. Organized in 1860. Members: 408,565.

Evangelical Lutheran Church.—In 1917 the United Norwegian Church, the Norwegian Synod and the Hauge Synod united under the name, Norwegian Lutheran Church of America. In 1930 this group became a constituent part of the American Lutheran Conference. The new name, The Evangelical Lutheran Church, was adopted at its General Convention in 1946. Members: 686,739.

The Evangelical Lutheran Joint Synod of Wisconsin and Other States.—This group, a constituent part of the Synodical Conference, was organized in Wisconsin in 1850. Members: 288,355.

Evangelical Lutheran Synod of Missouri, Ohio and Other States.—This group, the largest constituent part of the Synodical Conference, was organized in 1847, holds to an unwavering confessionalism and is the leader in the conservative group among the Lutherans. Members: 1,469,213.

Lutheran Free Church.—This body was organized in 1897 as the result of differences of opinion in the United Norwegian Church over control of the Augsburg Seminary. It became a constituent part of the American Lutheran Conference in 1930. Members: 53,325.

United Lutheran Church in America.—This group dates back to the Ministerium of Pennsylvania, organized in 1748, and beyond that to early colonial days. It represents the union of the General Synod, the General Council, and the United Synod of the South in 1918. Members: 1,778,943.

Methodist

African Methodist Episcopal Church.—This group was formed in Philadelphia in 1816 and extended throughout the South after the Civil War. Members: 868,735.

American Zion Church.—Until recently known as The African Methodist Episcopal Zion Church. The group was organized in

Church Membership, U. S., 1947

Source: *Christian Herald*.

Religious groups	No. of bodies	No. of members
Protestant bodies (over 50,000*).....	50	44,571,486
Protestant bodies (10,000-50,000*).....	48	1,257,724
Protestant bodies (under 10,000*).....	125	320,466
Total Protestant bodies.....	223	46,149,676
Roman Catholic.....	1	25,268,173
Jewish Congregations.....	1	4,641,000
Other non-Protestant bodies.....	28	1,327,339
Total non-Protestant bodies.....	30	31,236,512
Total all bodies in U. S.....	253	77,386,188

*Members per body.

continued, was made at St. Augustine, Fla. The continuous history of this Church in the colonies began at St. Mary's in 1634, in Maryland. Members: 25,268,173.

Russian Orthodox Church.—The Russian Orthodox Church entered Alaska in 1792 before its purchase by the United States. In 1872, its headquarters were moved to San Francisco and in 1905 to New York. Members: 300,000.

Serbian Orthodox Church.—This body of the Eastern Orthodox Church has its

1796, coming out of the John Street Methodist Church, New York. Members: 520,175.

Colored Methodist Episcopal Church.—In 1870, the General Conference of the M.E. Church, South, approved the request for its colored membership for the formation of their conferences into a separate ecclesiastical body. Members: 381,000.

The Methodist Church.—In April, 1939, the Uniting Conference forming The Methodist Church was held by representatives of the Methodist Episcopal Church, the Methodist Episcopal Church, South, and the Methodist Protestant Church. The Methodist Church in the United States originated with the efforts of John and Charles Wesley, leaders of the revival movement in England in the eighteenth century. Methodist emigrants from Ireland planted Methodism in America about 1760. In 1771 Francis Asbury, one of Wesley's preachers, after a Bishop, landed in Philadelphia. The Methodist Episcopal Church was organized in 1784-85. The Methodist Episcopal Church, South, dated from 1846, the separation from the Methodist Episcopal Church having taken place over the slavery issue. The Methodist Protestant Church dated from 1830, and was organized over the issue of lay representation. Members: 567,772.

Presbyterian

Cumberland Presbyterian Church.—In 1906, a presbytery (Cumberland) of the Presbyterian Church was dissolved by the Synod of Kentucky on account of its attitude toward revivalism. Members of the presbytery organized as an independent body in 1810 and became the Cumberland Presbyterian Church. When this body attempted to reunite with the Presbyterian Church in 1906, a minority preferred to continue as an independent church as above. Members: 76,276.

Presbyterian Church in the U. S.—This group is the branch of the Presbyterian Church which separated from the main body at the time of the Civil War. It is often called the "Southern" Presbyterian Church. Members: 613,701.

Presbyterian Church in the United States America.—This group, distinguished by its representative form of government and Calvinistic theology, appeared among the earliest colonists of America. Its first church was established about 1640, its first presbytery in 1706. Members: 2,234,798.

United Presbyterian Church of North America.—This group dates back to the Reformed Presbyterian (Covenanters) Church (1643) and the Associate Presbyterian (Seceders) Church (1733), both of Scotland. These two groups appeared in America in 1744 and 1753 respectively. They united and became the Associate Reformed Presbyterian Church in 1782. A minority, how-

ever, continued as the Associate Presbyterian Church. In 1858 the two groups united and became the United Presbyterian Church. Members: 202,605.

Others

Assemblies of God.—Independent, pentecostal, evangelical, missionary churches associated for cooperative effort in district and general councils. Organized in Arkansas in 1914. Members: 243,515.

Buddhist Churches of America.—Organized in 1914 as the Buddhist Mission of North America, this group was incorporated in 1942 under the present name and represents Buddhism in this country, the faith based on "the anatman doctrine, supplemented by the idea of karma, and nirvana, the holy ease or a blissful mental state of absolute freedom from evil." Members: 70,000.

Christian Reformed Church.—A group of Dutch Calvinists which dissented from the Reformed Church in America in 1857 and which was strengthened by later accessions from the same source and by immigration. Members: 135,788.

Church of Christ, Scientist.—Founded by Mary Baker Eddy in 1879. As defined by Mrs. Eddy, Christian Science is the scientific system of divine healing and the reinstatement of primitive Christianity. Number of churches and societies: 2,952.

Church of God.—This body, to be differentiated from the Church of God with headquarters at Anderson, Ind., is a holiness group and pentecostal. It began in 1886 in Tennessee, under the name of Christian Union, reorganized in 1902 as the Holiness Church. In 1907 it adopted the name above. Members: 90,666.

Church of God (Anderson, Ind.).—This group is one of the largest of the groups which have taken the name "Church of God." Its headquarters are at Anderson, Ind. It originated about 1880, now emphasizes Christian unity. Members: 92,604.

Church of God in Christ.—Organized in Arkansas in 1895, by C. P. Jones and C. H. Mason, who believed there was no salvation without holiness; incorporated 1897. Members: 300,000.

Church of the Brethren (Conservative Dunkers).—German pietists from Crefeld, Germany, under the leadership of Peter Becker, entered the colonies in 1719, and settled at Germantown, Philadelphia, Pa. They were called Dunkers (baptizers) and were immersionists. The members are conservative as to attire, oaths or affirmations, resistance to force, temperance, and the like. Members: 184,584.

Church of the Nazarene.—One of the larger holiness bodies, organized in Chicago, Oct., 1907. It is in general accord with the early doctrines of Methodism and

emphasizes entire sanctification. Members: 209,277.

Churches of Christ.—This body is made up of a large group of churches, formerly reported with the Disciples of Christ, but since the religious census of 1906, reported separately. They are strictly congregational and have no organization larger than the local congregation. Members: 682,172.

Congregational Christian Churches.*—Congregational churches date back to the Pilgrim Fathers and the early colonists of New England in 1620. The Christian churches date back to the Wesleyan and revival movements at the end of the eighteenth century. These two groups of churches were merged at Seattle, Wash., in 1931. Members: 1,157,764.

Disciples of Christ.—In the revival period of the early nineteenth century, a movement under Thomas Campbell and his son, Alexander, resulted in the establishment of a fellowship called Christians or Disciples. Believing that sects are unscriptural, they are biblicalists and immersionists. Members: 1,703,010.

Evangelical and Reformed Church.*—This body was formed on June 26, 1934, at Cleveland, Ohio, by a union of the Evangelical Synod of North America and the Reformed Church in the United States. The union was unique in that it left all details to be adjusted afterwards. The constitution was declared in effect at the General Synod which met at Lancaster, Pa., in June, 1940. The merged boards were organized and on February 1, 1941, took over the work of the two former denominations. Members: 708,382.

The Evangelical United Brethren Church.—This group had its origin in Johnstown, Pa., November 16, 1946, in the consummation of organic union between the Evangelical Church and the Church of the United Brethren in Christ. Both these former communions had their beginning in Pennsylvania in the evangelistic movement of the early 19th century. Jacob Albright was the founder of the Evangelical Church, and Dr. Philip William Otterbein was the founder of the United Brethren Church in 1800. In doctrine this Church is Arminian and in government Methodistic. Members: 712,616.

Federated Churches.—Actually not a denomination but a group of local churches in various parts of the country, federated under the above name. Members: 88,411.

Friends, Religious Society of (Five Years Meeting).—In 1902, twelve of the fourteen yearly meetings of Friends entered into a

loose confederation, forming the Five Years Meeting. Two of the original meetings (Kansas and Oregon) have withdrawn. Ohio and Philadelphia never joined. Together, however, these yearly meetings (aside from Philadelphia Yearly Meeting, Race St.) and the Five Years Meeting form what is known as the Orthodox group of Friends. Members: 112,541.

Independent Fundamental Churches of America.—Organized in 1930, at Cicero, Ill., by representatives of various independent churches. Members: 65,000.

International Church of the Four Square Gospel.—An evangelistic missionary body organized by Aimee Semple McPherson in 1927. The parent church is Angelus Temple in Los Angeles, organized in 1923, with many branch churches in the U. S. and mission stations in foreign countries. Members: 56,197.

Jewish Congregations.—Jews arrived in the colonies before 1650. The first congregation is recorded in 1656, in New York City, the Shearith Israel (Remnant of Israel). Members: 4,641,000.

Latter-Day Saints, Church of Jesus Christ of.—A group in which the Bible, the Book of Mormon, the Doctrine and Covenants and the Pearl of Great Price are regarded as the word of God. The primitive church organization is sought and the same gifts of tongues, prophecy, revelation, visions, healings and interpretation of tongues are continued. Members: 916,789.

Latter-Day Saints, Reorganized Church of Jesus Christ of.—A division among the Latter-Day Saints (Mormons) occurred on the death of Joseph Smith in 1844. His son, Joseph Smith, became presiding officer of this group, which has headquarters at Independence, Mo. Members: 127,381.

Mennonite Church.—The largest group of the Mennonites who began arriving in the U. S. in 1683, settling in Germantown, Pa. They derive their name from Menno Simons, their outstanding leader, born 1496. Members: 53,338.

The Protestant Episcopal Church.—This group entered the colonies with the earliest settlers as the Church of England. It became autonomous and adopted its present name in 1789. Members: 2,160,207.

Reformed Church in America.—This group was established by the earliest Dutch settlers of New York as the Reformed Protestant Dutch Church in 1628. It embraces many of the historic early colonial churches of New York and New Jersey and today has many strong churches in the middle and far west. Members: 178,318.

The Salvation Army.—An evangelistic organization, with a military government, first set up by General William Booth (1829-1912) in England and introduced into America in 1880. Members: 209,341.

*A proposal of merger of the Evangelical and Reformed Church and the Congregational Christian Churches was tentatively approved in 1948, and a committee was appointed to obtain the required consent of 75 percent of the churches. If the merger is completed, the new group will be known as the United Church of Christ.

Seventh Day Adventists.—This body developed out of the Adventist movement (1833-1844), which emphasized the imminent personal return of Jesus Christ. It emphasized the observance of the seventh-day Sabbath and in 1863 was numerous enough to organize a conference. At present it has twelve world divisions and carries on extensive publishing and medical work. Members: 215,545.

Spiritualists, International General Assembly of.—Organized in Buffalo, N. Y., in 1836 for the purpose of chartering Spiritualist churches. Members: 150,000.

Unitarian Association, American.—The Unitarian movement in Congregationalism, beginning in the eighteenth century, produced the American Unitarian Association in 1825. In 1865 a national conference was organized. Members: 69,104.

History of the Christian Church in England

34(?)	St. Alban martyred.	1646	Puritan rebellion. Presbyterianism becomes state religion.
50(?)	Ninian founds church in Scotland.	1660	Restoration. Power of Church of England restored under Charles II.
82(?)	St. Patrick begins conversion of Ireland.	1673	Test Act passed by Parliament. Excludes nonconformists and Roman Catholics from public office.
5th century	Arrival in England of Angles, Saxons and Jutes. Church isolated from Rome.	1701	Act of Succession. Sovereigns must belong to Church of England.
597	Augustine sent to convert Saxons.	1739	John Wesley founds Methodism.
601	Augustine made Archbishop by Pope.	1828	Repeal of Test Act
170	Murder of Archbishop Becket.	1829	Catholic emancipation.
172	Becket is canonized.	1833-45	Oxford Movement attempts to bring Church of England closer to ideals of ancient Church. Movement largely destroyed by conversion of Newman and others to Roman Catholicism.
534	Act of Supremacy makes king head of Church of England.		
554	Church again united with Rome under reign of Mary.		
558	Church restored to Crown at accession of Elizabeth.		
611	King James Version published.		

Archbishops of Canterbury

Sequence	Name	Year created	Sequence	Name	Year created
1	Augustine (consecrated Bishop 597)	601	33	Robert (Champart) of Jumièges	1051
2	Laurentius	604	34	Stigand	1052
3	Mellitus	619	35	Lanfranc	1070
4	Justus	624	36	Anselm	1093
5	Honorius	627	37	Ralph d'Escures	1114
6	Deusedit	655	38	William de Corbell	1123
7	Theodorus	668	39	Theobald	1139
8	Beorhtweald	693	40	Thomas Becket	1162
9	Tatwine	731	41	Richard (of Dover)	1174
10	Nothelm	735	42	Baldwin	1185
11	Cuthbeorht	740	43	Hubert Walter	1193
12	Breguwine	761	44	Stephen Langton	1207
13	Jaenbeorht	765	45	Richard le Grant (of Wetharshed)	1229
14	Æthelheard	793	46	Edmund Rich	1234
15	Wulfred	805	47	Boniface of Savoy	1245
16	Feologild	832	48	Robert Kilwardby	1273
17	Ceolnoth	833	49	John Pecham (Peckham)	1279
18	Æthelred	870	50	Robert Winchelsey	1294
19	Plegmund	890	51	Walter Reynolds	1313
20	Æthelhelm	914	52	Simon Mepeham	1328
21	Wulfhelm	923	53	John Stratford	1333
22	Oda	942	54	Thomas Bradwardine	1349
23	Ælfsige	959	55	Simon Islip	1349
24	Beorhthelm	959	56	Simon Langham	1366
25	Dunstan	960	57	William Whittlesey	1368
26	Æthelgar	988	58	Simon Sudbury	1375
27	Sigeric Serio	990	59	William Courtenay	1381
28	Ælfric	995	60	Thomas Arundel	1396
29	Ælfheah	1005	61	Roger Walden	1398
30	Lyfing	1013	62	Thomas Arundel (restored)	1399
31	Æthelnoth	1020			
32	Eadsige	1038			

Archbishops of Canterbury—(cont.)

Sequence	Name	Year created	Sequence	Name	Year created
63	Henry Chichele	1414	82	Thomas Tenison	1695
64	John Stafford	1443	83	William Wake	1716
65	John Kemp	1452	84	John Potter	1737
66	Thomas Bouchier	1454	85	Thomas Herring	1747
67	John Morton	1486	86	Matthew Hutton	1757
68	Henry Dean	1501	87	Thomas Secker	1758
69	William Warham	1503	88	Frederick Cornwallis	1768
70	Thomas Cranmer	1533	89	John Moore	1783
71	Reginald Pole	1556	90	Charles Manners-Sutton	1805
72	Matthew Parker	1559	91	William Howley	1828
73	Edmund Grindal	1576	92	John Bird Sumner	1848
74	John Whitgift	1583	93	Charles Thomas Longley	1862
75	Richard Bancroft	1604	94	Archibald Campbell Tait	1868
76	George Abbot	1611	95	Edward White Benson	1883
77	William Laud	1633	96	Frederick Temple	1896
78	William Juxon	1660	97	Randall Thomas Davidson	1903
79	Gilbert Sheldon	1663	98	Cosmo Gordon Lang	1928
80	William Sancroft	1678	99	William Temple	1942
81	John Tillotson	1691	100	Goeffrey Francis Fisher	1945

Bishops of the Protestant Episcopal Church

Source: The House of Bishops, Brooklyn, N. Y.

(Note: M—Missionary Bishop; C—Coadjutor; S—Suffragan)

Presiding Bishop: Henry K. Sherrill, 281 Fourth Ave., N.Y.C. 10. **Vice President of National Council:** John B. Bentley, 281 Fourth Ave., N.Y.C. 10. **Missionary Bishop in Charge of European Churches:** J. I. Blair Larned, P.O. Box 222, Gen. Post Office, Brooklyn 1, N. Y.

Alabama: Charles C. J. Carpenter, 2015 Sixth Ave., N., Birmingham 3.
 Alaska: William J. Gordon (M), The Bishop's Lodge, Nenana, Alaska.
 Albany: G. Ashton Oldham; Frederick L. Barry (C), 68 So. Swan St., Albany 6, N. Y.
 Anking: Lloyd R. Craighill (M), 425 Lion Hill, Wuhu, China.
 Arizona: Arthur B. Kinsolving, II (M), 100 W. Roosevelt St., Phoenix.
 Arkansas: R. Bland Mitchell, 1604 Center St., Little Rock.
 Atlanta: John M. Walker, 108 E. 17th St., Atlanta, Ga.
 Bethlehem: Frank W. Sterrett, 825 Delaware Ave., Bethlehem, Pa.
 Brazil, Southern: William M. M. Thomas (M); Louis C. Melcher (C); Athalicio T. Pithan (S); Caixa 88, Porto Alegre.
 California: Karl M. Block, 1055 Taylor St., San Francisco 8.
 Chicago: Wallace E. Conkling, 65 E. Huron St., Chicago 11, Ill.
 Colorado: Fred Ingle; Harold L. Bowen (C); 1313 Clarkson St., Denver 3.
 Connecticut: Frederick G. Budlong; Walter H. Gray (C); 207 Farmington Ave., Hartford 5.
 Cuba: Alexander H. Blankingship (M), Calle 13, esq. 6, Vedado, Havana.
 Dallas: C. Avery Mason, 5100 Ross Ave., Dallas 6, Tex.
 Delaware: Arthur R. McKinstry, Cathedral Church of St. John, Wilmington.
 Easton: William McClelland, Easton, Md.
 Eau Claire: William W. Horstick, 145 Marston Ave., Eau Claire, Wis.
 Erie: E. Sawyer, 323 W. 6th St., Erie, Pa.
 Florida: Frank A. Juhan; Hamilton West (C); 325 Market St., Jacksonville. (South Florida): John D. Wing; Henry I. Louttit (C); 228 E. Central Ave., Orlando.
 Fond du Lac: Harwood Sturtevant, 75 W. Division St., Fond du Lac, Wis.
 Georgia: Middleton S. Barnwell, 7 E. St. Julian St., Savannah.
 Haiti: C. A. Voegeli (M), Port-au-Prince.
 Harrisburg: J. Thomas Helstand, 2405 No. Front St., Harrisburg, Pa.
 Honolulu: Harry S. Kennedy (M), Queen Emma Sq., Honolulu 43, Hawaii.
 Idaho: Frank A. Rhea (M), Box 985, Boise.
 Indiana, Northern: Reginald Mallett, 2117 E. Jefferson Blvd., South Bend 17.
 Indianapolis: Richard A. Kirshhoffer, 1537 Central Ave., Indianapolis 2, Ind.
 Iowa: Elwood L. Haines, 208 Flynn Bldg., Des Moines.
 Kansas: Goodrich R. Fenner, Bethany Pl., Topeka.
 Kentucky: Charles Clingman, 421 So. 2nd St., Louisville 2.
 Lexington: William R. Moody, 436 W. 6th St., Lexington, Ky.
 Liberia: Bravid W. Harris (M), Bishop's House, Monrovia.
 Long Island: James P. DeWolfe, Garden City, N. Y.

- Los Angeles: Francis E. I. Bloy, 615 So. Figueroa St., Los Angeles, Calif.
- Louisiana: No bishop at present.
- Maine: Oliver L. Loring, 143 State St., Portland 3.
- Maryland: Noble C. Powell, 105 W. Monument St., Baltimore 1.
- Massachusetts: Norman B. Nash; Raymond A. Heron (S); 1 Joy St., Boston 8. (Western Massachusetts): William A. Lawrence, 37 Chestnut St., Springfield 5.
- Mexico: Efrain Salinas y Velasco (M), Mier y Pesado 212, Colonia del Valle, Mex. City.
- Michigan: Richard S. M. Emrich; Russell S. Hubbard (S); 63 E. Hancock Ave., Detroit 1. (Northern Michigan): Herman R. Page, 501 E. Arch St., Marquette. (Western Michigan): Lewis B. Whittemore, 134 No. Division Ave., Grand Rapids 2.
- Milwaukee: Benjamin F. P. Ivins, 804 E. Juneau Ave., Milwaukee 2, Wis.
- Minnesota: Stephen E. Keeler, 1409 Willow St., Minneapolis 2.
- Mississippi: Duncan M. Gray, P.O. Box 953, Jackson 108.
- Missouri: William Scarlett, 1210 Locust St., St. Louis 3. (West Missouri): Robert N. Spencer, 415 W. 13th St., Kansas City.
- Montana: Henry H. Daniels, Helena.
- Nebraska: Howard R. Brinker, 1111 City Natl. Bank Bldg., Omaha 2.
- Nevada: William F. Lewis (M), 505 Ridge St., Reno.
- Newark: Benjamin M. Washburn; Theodore R. Ludlow (S); 24 Rector St., Newark 2, N. J.
- New Hampshire: Charles F. Hall, Diocesan House, Concord.
- New Jersey: Wallace J. Gardner; Alfred L. Banyard (S); 808 W. State St., Trenton.
- New Mexico and Southwest Texas: James M. Stoney, 318 W. Silver Ave., Albuquerque.
- New York: Charles K. Gilbert, 1047 Amsterdam Ave., N.Y.C. 25; Horace W. B. Donegan (S), 8 Avon Rd., Larchmont. (Central N. Y.): Malcolm E. Peabody, 429 James St., Syracuse 3. (Western N. Y.): Lauriston L. Scaife, 237 North St., Buffalo 1.
- North Carolina: Edwin A. Penick, 802 Hillsboro St., Raleigh. (East Carolina): Thomas H. Wright, 507 Southern Bldg., Wilmington. (Western North Carolina): M. George Henry, 60 Ravenscroft Dr., Asheville.
- North Dakota: Douglass H. Atwill (M), 206 Eighth St. S., Fargo.
- Ohio: Beverly D. Tucker, 2241 Prospect Ave., Cleveland 15. (Southern Ohio): Henry W. Hobson, 412 Sycamore St., Cincinnati 2.
- Oklahoma: Thomas Casady, P.O. Box 1098, Oklahoma City 1.
- Olympia: Stephen F. Bayne, Jr., 808 American Bldg., Seattle 4, Wash.
- Oregon: Benjamin D. Dagwell, 1234 No. 23rd Ave., Portland 10. (Eastern Oregon): Lane W. Barton (M), P.O. Box 951, Bend.
- Panama Canal Zone: Reginald H. Gooden (M), Box 2011, Ancon, C.Z.
- Pennsylvania: Oliver J. Hart; William P. Remington (S); 202 So. 19th St., Philadelphia 3.
- Philippines: Norman S. Binsted (M); Robert F. Wilner (S); 1015 Magdalene St., Manila.
- Pittsburgh: Austin Pardue, 325 Oliver Ave., Pittsburgh 22, Pa.
- Puerto Rico: Charles F. Boynton (M), P.O. Box 1729, San Juan 8.
- Quincy: William L. Essex, 601 Main St., Peoria 2, Ill.
- Rhode Island: Granville G. Bennett, 101 Benefit St., Providence 3.
- Rochester: Bart. H. Reinheimer, 111 Merri-man St., Rochester 7, N. Y.
- Sacramento: A. W. Noel Porter, 2600 Capitol Ave., Sacramento 16, Calif.
- Salina: Shirley H. Nichols (M), Salina, Kans.
- San Joaquin: Sumner F. D. Walters (M), 115 E. Miner Ave., Stockton 3, Calif.
- Shanghai: William P. Roberts (M), 874 Hart Rd., Shanghai, China.
- South Carolina: Thomas N. Carruthers, 142 Church St., Charleston 8. (Upper South Carolina): John J. Gravatt, Trinity Parish House, Columbia 56.
- South Dakota: W. Blair Roberts (M); Conrad H. Gesner (C); 300 W. 18th St., Sioux Falls.
- Spokane: Edward M. Cross (M), So. 1125 Grand Ave., Spokane 10, Wash.
- Springfield: Charles A. Clough, 821 So. 2nd St., Springfield, Ill.
- Tennessee: Edmund P. Dandridge, 900 Broadway, Nashville 3; Theodore N. Barth (C), 102 No. 2nd St., Memphis 3.
- Texas: Clinton S. Quin, 1117 Texas Ave., Houston 2; John E. Hines (C), 2904 Bowman St., Austin. (North Texas): George H. Quarterman (M), P.O. Box 652, Amarillo. (West Texas): Everett H. Jones, 108 W. French Pl., San Antonio 1.
- Utah: Stephen C. Clark (M), 55 B St., Salt Lake City 3.
- Vermont: Vedder Van Dyck, Bishop's House, Rock Point, Burlington.
- Virginia: Frederick D. Goodwin, 110 W. Franklin St., Richmond 20; Wiley R. Mason (S), 978 Locust Ave., Charlottesville. (Southern Virginia): William A. Brown; George P. Gunn (C); 618 Stockley Gardens, Norfolk 7. (Southwestern Virginia): Henry D. Phillips, Box 2068, Roanoke 9.
- Washington, D.C.: Angus Dun, 1702 Rhode Island Ave., Washington 6, D.C.
- West Virginia: Robert E. L. Strider, 406 City Bank Bldg., Wheeling.
- Wyoming: Winfred H. Ziegler (M), RFD 171, Carmel, Calif.; James W. Hunter (C), P.O. Box 17, Laramie.

Methodist Bishops

Source: Methodist Church Headquarters, New York City.

In Service in United States

James C. Baker, 125 East Sunset Blvd., Los Angeles 12, Calif.
 J. W. E. Bowen, 250 Auburn Ave., NE, Atlanta, Ga.
 Charles W. Brashares, 615 Tenth St., Des Moines, Iowa.
 Robert N. Brooks, 631 Baronne St., New Orleans 13, La.
 Fred Pierce Corson, 1701 Arch St., Philadelphia 3, Pa.
 Ralph S. Cushman, 1987 Summit Ave., St. Paul 5, Minn.
 Dana Dawson, 810 National Bank Bldg., Topeka, Kans.
 Charles W. Flint, 100 Maryland Ave., N.E., Washington 2, D. C.
 Marvin A. Franklin, Millsaps Bldg., Jackson, Miss.
 Costen J. Harrell, 2020 Roswell Ave., Charlotte 4, N. C.
 Ivan Lee Holt, 506 Olive St., St. Louis, Mo.
 Edward W. Kelly, 2731 Pine St., St. Louis 3.
 Gerald H. Kennedy, 512 Journal Bldg., Portland, Oreg.
 Paul B. Kern, 810 Bway., Nashville 2, Tenn.
 Earl Ledden, 317 Jefferson St., Syracuse 2, N. Y.
 John Wesley Lord, 581 Boylston St., Boston 16, Mass.
 J. R. Magee, 77 W. Washington, Chicago 2.
 Paul E. Martin, 723 Center St., Little Rock, Ark.
 W. C. Martin, 1910 Main St., Dallas 1, Tex.
 Arthur J. Moore, 63 Auburn Ave., N.E., Atlanta 3, Ga.
 H. Clifford Northcott, 516 First National Bank Bldg., Madison 3, Wis.
 G. Bromley Oxnam, 150 Fifth Ave., New York 11, N. Y.
 William Walter Peele, 205 Methodist Bldg., Richmond 16, Va.
 Gleen R. Phillips, 317 Trinity Bldg., Denver, Colo.
 Clare Purcell, 824 Comer Bldg., Birmingham 3, Ala.
 Richard C. Raines, 305 Underwriters Bldg., Indianapolis, Ind.
 Marshall R. Reed, 1205 Kales Bldg., Detroit 26, Mich.
 Alexander P. Shaw, 1206 Etting St., Baltimore 17, Md.

Roy H. Short, 1856 Challen Ave., Jacksonville, Fla.
 A. Frank Smith, 5501 Main St., Houston 4, Tex.
 W. Angle Smith, 125 N.W. 15th St., Oklahoma City, Okla.
 Donald H. Tippet, 83 McAllister St., San Francisco 2, Calif.
 William T. Watkins, 1820 Casselberry Rd., Louisville 5, Ky.
 Hazen G. Werner, 44 E. Broad St., Columbus 15, Ohio.
 Lloyd C. Wicke, Methodist Center, Smithfield at 7th, Pittsburgh 19, Pa.

In Service Abroad

Newell S. Booth, B.P. 522, Elisabethville, Belgian Congo, Africa.
 Paul N. Garber, 37 Quai Wilson, Geneva, Switzerland.
 Willis J. King, Monrovia, Liberia, W. Af.

Central Conference Bishops

D. D. Alejandro, 907 Oroquieta, Manila, Philippine Islands.
 Theodore Arvidson, Box 5020, Radmansgatan IV, Stockholm, Sweden.
 Enrique C. Balloch, Casilla 87, Santiago, Chile.
 W. Y. Chen, 10 Dai Chia Hang, Chungking, Sx., China.
 Z. T. Kaung, Hapamon, Peking, North China.
 Carleton Lacy, The Methodist Church, Foochow, Fukien, China.
 Shot K. Mondol, Methodist Church, Hyderabad, India.
 J. Waskom Pickett, 12 Boulevard Road, Delhi, India.
 Clement D. Rockey, 37 Cantonment Road, Lucknow, India.
 J. W. Ernst Sommer, 180 Ginnheimer Landstrasse, Frankfurt am Main, Ginnheim, Germany.
 John A. Subhan, Robinson Memorial Byculla, Bombay, India.
 Ralph A. Ward, 169 Yuen Ming Yuen Rd., Shanghai, China.
 Arthur F. Wesley, Rivadavia 4044, Buenos Aires, Argentina.

Roman Catholic Pontiffs

Source for Catholic information: *The National Catholic Almanac.*

St. Peter, of Bethsaida in Galilee, Prince of the Apostles, was the first Pope. He resided first in Antioch and then for twenty-five years in Rome, where he suffered martyrdom in 64 or 67 of the modern era. He was followed by St. Linus.

Name	Birthplace	Acces.	End of reign	Name	Birthplace	Acces.	End of reign
St. Linus	Tuscia	67	76	St. Sixtus I	Rome	115	125
St. Anacletus (Cletus)	Rome	76	88	St. Telesphorus	Greece	125	136
St. Clement	Rome	88	97	St. Hyginus	Greece	136	140
St. Evaristus	Greece	97	105	St. Pius I	Aquileia	140	155
St. Alexander I	Rome	105	115	St. Anicetus	Syria	155	166

Name	Birthplace	Accession	End of reign	Name	Birthplace	Accession	End of reign
Peter	Campania	166	175	Canon	Unknown	686	687
Eleutherius	Epirus	175	189	St. Sergius I	Syria	687	701
Victor I	Africa	189	199	John VI	Greece	701	705
Cephrinus	Rome	199	217	John VII	Greece	705	707
Callistus I	Rome	217	222	Sisinnius	Syria	708	708
Urban I	Rome	222	230	Constantine	Syria	708	715
Pontian	Rome	230	235	St. Gregory II	Rome	715	731
Anterus	Greece	235	236	St. Gregory III	Syria	731	741
Fabian	Rome	236	250	St. Zachary	Greece	741	752
Cornelius	Rome	251	253	Stephen II	Rome	752	752
Lucius I	Rome	253	254	Stephen III	Rome	752	757
Stephen I	Rome	254	257	St. Paul I	Rome	757	767
Sixtus II	Greece	257	258	Stephen IV	Sicily	768	772
Dionysius	Unknown	259	268	Adrian I	Rome	772	795
Eligius I	Rome	269	274	St. Leo III	Rome	795	816
Eutychian	Luni	275	283	Stephen V	Rome	816	817
Caius	Dalmatia	283	296	St. Paschal I	Rome	817	824
Marcellinus	Rome	296	304	Eugenius II	Rome	824	827
Marcellus I	Rome	308	309	Valentine	Rome	827	827
Eusebius	Greece	309	309	Gregory IV	Rome	827	844
Melchades	Africa	311	314	Sergius II	Rome	844	847
Sylvester I	Rome	314	335	St. Leo IV	Rome	847	855
Marcus	Rome	336	336	Benedict III	Rome	855	858
Julius I	Rome	337	352	St. Nicholas	Rome	858	867
Liberius	Rome	352	366	Adrian II	Rome	867	872
Damasus I	Spain	366	384	John VIII	Rome	872	882
Siricius	Rome	384	399	Marinus I	Gallese	882	884
Anastasius I	Rome	399	401	St. Adrian III	Rome	884	885
Innocent I	Albano	401	417	Stephen VI	Rome	885	891
Adrian I	Greece	417	418	Formosus	Portus	891	896
Boniface I	Rome	418	422	Boniface VI	Rome	896	896
Celestine I	Campania	422	432	Stephen VII	Rome	896	897
Sixtus III	Rome	432	440	Romanus	Gallese	897	897
Leo I (the Great)	Tuscia	440	461	Theodore II	Rome	897	897
Gilary	Sardo	461	468	John IX	Tivoli	898	900
Simplicius	Tivoli	468	483	Benedict IV	Rome	900	903
Eligius III (II)	Rome	483	492	Leo V	Ardea	903	903
Elasius I	Africa	492	496	Sergius III	Rome	904	911
Lasius II	Rome	496	498	Anastasius	Rome	911	913
Symmachus	Sardo	498	514	Landus	Sabina	913	914
Formisdas	Frosinone	514	523	John X	Tossignano	914	928
John I	Tuscia	523	526	Leo VI	Rome	928	928
Eligius IV (III)	Sannio	526	530	Stephen VIII	Rome	928	931
John II	Rome	530	532	John XI	Rome	931	935
John III	Rome	533	535	Leo VII	Rome	936	939
Agapitus I	Rome	535	536	Stephen IX	Rome	939	942
Silverius	Campania	536	537	Marinus II	Rome	942	946
Agapitus II	Rome	537	555	Agapitus II	Rome	946	955
John XII	Rome	556	561	John XII	Tusculum	955	964
Leo VIII	Rome	561	574	Leo VIII	Rome	963	965
Benedict V	Rome	575	579	Benedict V	Rome	964	966
John XIII	Rome	579	590	John XIII	Rome	965	972
Benedict VI	Rome	590	604	Benedict VI	Rome	973	974
Benedict VII	Tuscia	604	606	Benedict VII	Rome	974	983
John XIV	Rome	607	607	John XIV	Pavia	983	984
John XV	Marsi	608	615	John XV	Rome	985	996
Gregory V	Rome	615	618	Gregory V	Saxony	996	999
Sylvester II	Alvernia	999	1003	Sylvester II	Alvernia	999	1003
John XVII	Rome	1003	1003	John XVII	Rome	1003	1003
John XVIII	Rome	1004	1009	John XVIII	Rome	1004	1009
Sergius IV	Rome	1009	1012	Sergius IV	Rome	1009	1012
Benedict VIII	Tusculum	1012	1024	Benedict VIII	Tusculum	1012	1024
John XIX	Tusculum	1024	1032	John XIX	Tusculum	1024	1032
Benedict IX	Tusculum	1032	1044	Benedict IX	Tusculum	1032	1044
Sylvester III	Rome	1045	1045	Sylvester III	Rome	1045	1045
Benedict IX (2nd time)	.....	1045	1045	Benedict IX (2nd time)	.....	1045	1045
Gregory VI	Rome	1045	1046	Gregory VI	Rome	1045	1046
Clement II	Saxony	1046	1047	Clement II	Saxony	1046	1047
Benedict IX (3rd time)	.....	1047	1048	Benedict IX (3rd time)	.....	1047	1048
Damasus II	Bavaria	1048	1048	Damasus II	Bavaria	1048	1048
St. Leo IX	Egisheim-Dagsburg	1049	1054	St. Leo IX	Egisheim-Dagsburg	1049	1054
Victor II	Dollnstein-Hirschberg	1055	1057	Victor II	Dollnstein-Hirschberg	1055	1057

Roman Catholic Pontiffs—(cont.)

Name	Birthplace	Accession	End of reign	Name	Birthplace	Accession	End of reign
Stephen X	Lorraine	1057	1058	Nicholas V	Sarzana	1447	1455
Nicholas II	Burgundy	1059	1061	Callistus III	Valencia	1455	1458
Alexander II	Milan	1061	1073	Pius II	Siena	1458	1464
St. Gregory VII	Tuscia	1073	1085	Paul II	Venetia	1464	1471
Bl. Victor III	Benevento	1086	1087	Sixtus IV	Savona	1471	1484
Bl. Urban II	France	1088	1099	Innocent VIII	Genoa	1484	1492
Paschal II	Ravenna	1099	1118	Alexander VI	Valencia	1492	1503
Gelasius II	Gaeta	1118	1119	Pius III	Siena	1503	1503
Callistus II	Burgundy	1119	1124	Julius II	Savona	1503	1513
Honorius II	Fiagnano	1124	1130	Leo X	Florence	1513	1521
Innocent II	Rome	1130	1143	Adrian VI	Utrecht	1522	1523
Celestine II	Citta di Castello	1143	1144	Clement VII	Florence	1523	1534
Lucius II	Bologna	1144	1145	Paul III	Rome	1534	1549
Bl. Eugene III	Pisa	1145	1153	Julius III	Rome	1550	1555
Anastasius IV	Rome	1153	1154	Marcellus II	Montepulciano	1555	1555
Adrian IV	England	1154	1159	Paul IV	Naples	1555	1559
Alexander III	Siena	1159	1181	Pius IV	Milan	1559	1565
Lucius III	Lucca	1181	1185	St. Pius V	Bosco	1566	1572
Urban III	Milan	1185	1187	Gregory XIII	Bologna	1572	1585
Gregory VIII	Benevento	1187	1187	Sixtus V	Grottammare	1585	1590
Clement III	Rome	1187	1191	Urban VII	Rome	1590	1590
Celestine III	Rome	1191	1198	Gregory XIV	Cremona	1590	1591
Innocent III	Anagni	1198	1216	Innocent IX	Bologna	1591	1591
Honorius III	Rome	1216	1227	Clement VIII	Florence	1592	1605
Gregory IX	Anagni	1227	1241	Leo XI	Florence	1605	1605
Celestine IV	Milan	1241	1241	Paul V	Rome	1605	1621
Innocent IV	Genoa	1243	1254	Gregory XV	Bologna	1621	1623
Alexander IV	Anagni	1254	1261	Urban VIII	Florence	1623	1644
Urban IV	Troyes	1261	1264	Innocent X	Rome	1644	1655
Clement IV	France	1265	1268	Alexander VII	Siena	1655	1667
Bl. Gregory X	Piacenza	1271	1276	Clement IX	Pistoia	1667	1669
Bl. Innocent V	Savoy	1276	1276	Clement X	Rome	1670	1676
Adrian V	Genoa	1276	1276	Innocent XI	Como	1676	1689
John XXI	Portugal	1276	1277	Alexander VIII	Venetia	1689	1691
Nicholas III	Rome	1277	1280	Innocent XII	Naples	1691	1700
Martin IV	France	1281	1285	Clement XI	Urbino	1700	1721
Honorius IV	Rome	1285	1287	Innocent XIII	Rome	1721	1724
Nicholas IV	Ascoli	1288	1292	Benedict XIII	Rome	1724	1730
St. Celestine V	Isernia	1294	1294	Clement XII	Florence	1730	1740
Boniface VIII	Anagni	1294	1303	Benedict XIV	Bologna	1740	1758
Bl. Benedict XI	Treviso	1303	1304	Clement XIII	Venetia	1758	1769
Clement V	France	1305	1314	Clement XIV	Rimini	1769	1774
John XXII	Cahors	1316	1334	Pius VI	Cesena	1775	1799
Benedict XII	France	1334	1342	Pius VII	Cesena	1800	1823
Clement VI	France	1342	1352	Leo XII	Fabriano	1823	1829
Innocent VI	France	1352	1362	Pius VIII	Cingoli	1829	1830
Bl. Urban V	Grimoard	1362	1370	Gregory XVI	Belluno	1831	1846
Gregory XI	France	1370	1378	Pius IX	Sanigallia	1846	1878
Urban VI	Naples	1378	1389	Leo XIII	Carpineto	1878	1903
Boniface IX	Naples	1389	1404	Pius X	Riese	1903	1914
Innocent VII	Sulmona	1404	1406	Benedict XV	Genoa	1914	1922
Gregory XII	Venetia	1406	1415	Pius XI	Desio	1922	1939
Martin V	Rome	1417	1431	Pius XII	Rome	1939	
Eugene IV	Venetia	1431	1447				

NOTE: This list of Popes, adapted from the *Annuario Pontificio*, is in accordance with the recent revisions made by Monsignor Mercati, Prefect of the Vatican's archives. All Popes before Sylvester I are listed as martyrs; other martyrs were: St. John I, St. Silverius and St. Martin I. The accession year is that during which the Pope was elected.

The College of Cardinals

Cardinal-Bishops

Year of creation	Name	Office or dignity	Nationality
1930	Francesco Marchetti-Selvaggiani	Bishop of Frascati; Vicar General of His Holiness; Archpriest of the Patriarchal Basilica of the Lateran; Secretary of the Congregation of the Holy Office	Italian
1936	Eugene Tisserant	Secretary of the Congregation for the Oriental Church	French

Cardinal's Name	Office or dignity	Nationality
16 Clemente Micara	Bishop of Velletri; Prefect of the Congregation of Rites.	Italian
Cardinal-Priests		
6 Alessio Ascalesi	Archbishop of Naples	Italian
1 Michael von Faulhaber	Archbishop of Munich and Freising	German
1 Dennis J. Dougherty	Archbishop of Philadelphia	American
3 Giovanni B. Nasalli-Rocca di Cornigliano	Archbishop of Bologna	Italian
5 Alessandro Verde	Archpriest of Liberian Patriarchal Basilica of St. Mary Major	Italian
7 Joseph Ernest Van Roey	Archbishop of Malines	Belgian
7 Pedro Segura y Saenz	Archbishop of Seville	Spanish
9 Ildefonso Schuster, O. S. B.	Archbishop of Milan	Italian
9 Manuel Gonçalves Cerejeira	Patriarch of Lisbon	Portuguese
9 Luigi Lavitrano	Prefect of the Congregation of Religious	Italian
0 Achilles Liénart	Bishop of Lille	French
3 Pietro Fumasoni-Biondi	Prefect of the Congregation for the Propagation of the Faith	Italian
3 Federico Tedeschi	Archpriest of Vatican Basilica; Prefect of the Congregation of the Basilica of St. Peter; Apostolic Datary; Camerlengo of the College of Cardinals	Italian
3 Maurilio Fossati	Archbishop of Turin	Italian
3 Elia dalla Costa	Archbishop of Florence	Italian
3 Theodore Innitzer	Archbishop of Vienna	Austrian
5 Ignatius Tappouni	Syrian Patriarch of Antioch	Iraqi
5 Francesco Marmaggl	Prefect of the Congregation of the Council	Italian
5 Emmanuel Suhard	Archbishop of Paris	French
5 Santiago Copello	Archbishop of Buenos Aires	Argentine
5 Domenico Jorio	Prefect of the Congregation of the Sacraments	Italian
5 Massimo Massimi	Prefect of the Supreme Tribunal of the Apostolic Signature; President of the Commission on the Authentic Interpretation of the Code of Canon Law	Italian
7 Adeodato Giovanni Piazzini, O. C. D.	Patriarch of Venice	Italian
7 Giuseppe Pizzardo	Prefect of the Congregation of Seminaries and Universities	Italian
7 Pierre Marie Gerlier	Archbishop of Lyons	French
6 Gregory Peter XV Agagianian	Patriarch of Cilicia in Armenia	Transcaucasian
3 Benedetto Aloisi Masella	Pro-Prefect of the Sacred Congregation of the Sacraments	Italian
3 Adam Stephen Sapieha	Archbishop of Cracow	Polish
3 Edward Mooney	Archbishop of Detroit	American
3 Jules Saliege	Archbishop of Toulouse	French
3 James McGuigan	Archbishop of Toronto	Canadian
3 Samuel A. Stritch	Archbishop of Chicago	American
3 Emile Roques	Archbishop of Rennes	French
3 Jon De Jong	Archbishop of Utrecht	Dutch
3 Carlo Carmelo de Vasconcellos Motta	Archbishop of São Paulo	Brazilian
3 Norman Gilroy	Archbishop of Sydney	Australian
3 Francis J. Spellman	Archbishop of New York	American
3 Jose Maria Caro Rodriguez	Archbishop of Santiago	Chilean
Teodosio Clemente de Gouveia	Archbishop of Lourenço Marques, Mozambique	Portuguese
Jaime de Barros Camara	Archbishop of Rio de Janeiro	Brazilian
Enrique Pla y Deniel	Archbishop of Toledo and Primate of Spain	Spanish
Manuel Arteaga y Betancourt	Archbishop of Havana	Cuban

The College of Cardinals—(cont.)

Year of creation	Name	Office or dignity	Nationality
1946	Joseph Frings	Archbishop of Cologne	German
1946	Juan Gualberto Guevara	Archbishop of Lima	Peruvian
1946	Bernard Griffin	Archbishop of Westminster	English
1946	Josef Mindszenty	Archbishop of Esztergom and Primate of Hungary	Hungarian
1946	Ernesto Ruffini	Archbishop of Palermo	Italian
1946	Konrad von Preysing	Bishop of Berlin	German
1946	Antonio Caggiano	Bishop of Rosario	Argentine
1946	Thomas Tien	Archbishop of Peiping	Chinese

Cardinal-Deacons

1935	Nicola Canali	Grand Penitentiary; President of the Commission charged with the Administration of Vatican City	Italian
1936	Giovanni Mercati	Librarian and Archivist of the Holy Roman Church	Italian
1946	Giuseppe Bruno	Secretary of the Commission on the Authentic Interpretation of the Code of Canon Law	Italian

Archdioceses of the United States

See	Formed	Archbishop	Consecrated
Baltimore, Md.	1789	Francis P. Keough	1934
Boston, Mass.	1808	Richard J. Cushing	1939
Chicago, Ill.	1843	Samuel Cardinal Stritch	1921
Cincinnati, Ohio	1821	John T. McNicholas, O.P.	1918
Denver, Colo.	1887	Urban J. Vehr	1931
Detroit, Mich.	1833	Edward Cardinal Mooney	1926
Dubuque, Iowa	1837	Henry P. Rohlman	1927
Indianapolis, Ind.	1834	Paul C. Schulte	1937
Los Angeles, Calif.	1840	J. Francis A. McIntyre	1941
Louisville, Ky.	1808	John A. Floersh	1923
Milwaukee, Wis.	1843	Moses E. Kiley	1934
Newark, N. J.	1853	Thomas J. Walsh	1918
New Orleans, La.	1793	Joseph F. Rummel	1928
New York, N. Y.	1808	Francis Cardinal Spellman	1932
Omaha, Nebr.	1885	Gerald T. Bergan	1934
Philadelphia, Pa.	1808	Dennis Cardinal Dougherty	1903
Portland, Oreg.	1846	Edward D. Howard	1924
St. Louis, Mo.	1826	Joseph E. Ritter	1933
St. Paul, Minn.	1850	John G. Murray	1920
San Antonio, Tex.	1874	Robert E. Lucey	1934
San Francisco, Calif.	1853	John J. Mitty	1926
Santa Fe, N. Mex.	1850	Edwin V. Byrne	1925
Washington, D. C.	1939	Patrick A. O'Boyle	1948

Jewish Congregational and Rabbinical Organizations

Source: Yearbook of American Churches.

Union of American Hebrew Congregations: Merchants Bldg., Cincinnati, Ohio; Pres., Maurice N. Eisendrath.	Rabbinical Assembly of America: 3080 Broadway, New York, N. Y.; Pres., David Aronson; Corr. Sec., Ira Eisenstein.
Union of Orthodox Jewish Congregations of America: 305 Broadway, New York, N. Y.; Pres., Samuel Nirenstein; Exec. Dir., Leo S. Hilsenrad.	Rabbinical Council of America: 331 Madison Ave., New York, N. Y.; Pres., Dr. Israel Tabak; Sec., Morris H. Finer.
United Synagogue of America: 3080 Broadway, New York, N. Y.; Pres., Samuel Rothstein; Exec. Dir., Albert I. Gordon.	Union of Orthodox Rabbis of the United States and Canada: 132 Nassau St., New York, N. Y.; Exec. Dir., L. Seltzer.
Central Conference of American Rabbis: 204 Buford Pl., Macon, Ga.; Pres., Abba Hillel Silver; Adm. Sec., Isaac E. Marcuson.	Synagogue Council of America: 3785 Broadway, New York, N. Y. (Represents several of the organizations listed above.); Pres., William F. Rosenblum; Asst. to Pres., Ahron Opher; Sec., William Weiss.

Religious and Secular Holidays, 1949

NEW YEAR'S DAY—Saturday, Jan. 1—A legal holiday in all states and the District of Columbia, New Year's Day has its origin in Roman times, when sacrifices were offered to Janus, the two-faced Roman deity who looked back on the past and forward to the future.

EPIPHANY—Thursday, Jan. 6—Falls the twelfth day after Christmas and commemorates the manifestation of Jesus as the Son of God, as represented by the adoration of the Magi, the baptism of Jesus, and the miracle of the wine at the marriage feast at Cana. Epiphany originally marked the beginning of the carnival season preceding Lent, and the evening (sometimes the eve) is known as Twelfth Night.

LINCOLN'S BIRTHDAY—Saturday, Feb. 12—Observed as a legal holiday in Alaska, California, Colorado, Connecticut, Delaware, Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, New Jersey, New Mexico, New York, North Dakota, Ohio, Oregon, Pennsylvania, South Dakota, Tennessee, Utah, Washington, West Virginia and Wyoming. In Massachusetts, the Governor issues a proclamation.

ST. VALENTINE'S DAY—Monday, Feb. 14—A day long held sacred to lovers, St. Valentine's Day may have come from the belief that on February 14, birds begin to mate, although this theory has no more validity than others that have been advanced. It is notable nowadays for the sending of a valentine, generally a card embossed with a heart, to a loved one.

WASHINGTON'S BIRTHDAY—Tuesday, Feb. 22—The birthday of George Washington is celebrated as a legal holiday in every state of the Union, the District of Columbia and all territories. The observance began in 1796, three years before his death.

SHROVE TUESDAY—March 1—Falls the day before Ash Wednesday and marks the end of the carnival season, which once began on Epiphany but is now usually celebrated the last three days before Lent. In France, the day is known as Mardi Gras (Fat Tuesday), and Mardi Gras celebrations are also held in several American cities, particularly in New Orleans. The day is sometimes called Pancake Tuesday by the English because of the need of using up fats which were prohibited during Lent.

ASH WEDNESDAY—March 2—The first day of the Lenten season, which lasts forty days. Having its origin sometime before A.D. 1000, it is a day of public penance and is marked in the Roman Catholic Church by the burning of the palms blessed on the previous Palm Sunday. With his thumb, the priest then marks a cross upon the

forehead of each worshipper. The Anglican Church and a few Protestant groups in the United States also celebrate the day, but generally without the use of ashes.

ST. PATRICK'S DAY—Thursday, March 17—St. Patrick, patron saint of Ireland, has been honored in America since the first days of the nation. There are many dinners and meetings and perhaps the most notable part of the observance is the annual St. Patrick's Day parade on Fifth Avenue in New York City.

PALM SUNDAY—April 10—Is observed the Sunday before Easter to commemorate the entry of Jesus into Jerusalem. The procession and the ceremonies introducing the benediction of palms probably had their origin in Jerusalem. It seems certain that the bearing of the palms during services was the earlier practice, then came the procession, and later the benediction of the palms.

FIRST DAY OF PASSOVER (Pesach)—Thursday, April 14 (Nisan 15)—The Feast of the Passover, also called the Feast of Unleavened Bread, commemorates the escape of the first-born of the Jews from the Angel of Death, who took from the Egyptians their first-born, thus fulfilling the prophecy of Moses. As the Jews fled Egypt, they ate unleavened bread, and from that time the Jews have allowed no leavening in the houses during Passover, bread being replaced by matzoth.

GOOD FRIDAY—April 15—The Friday before Easter Sunday, observed by all branches of the Christian Church in commemoration of the Crucifixion, which is retold during services from the Gospel of St. John. It is the only day of the year upon which Mass may not be said and only those who are in danger of death may receive Holy Communion. The eating of hot cross buns on this holiday is said to have originated in England.

EASTER SUNDAY—April 17—Observed in all Christian churches, Easter is the principal feast of the ecclesiastical year, and commemorates the Resurrection of Jesus. It is celebrated on the first Sunday after the full moon which occurs on or next after March 21 and is therefore celebrated between March 22 and April 25 inclusive. This date was fixed by the Council of Nicaea in 325. The Venerable Bede, the English monk and ecclesiastical historian, claimed the word to have originated from the Anglo-Saxon *Eôstre*, old Teutonic goddess of spring.

ASCENSION DAY—Thursday, May 26—Took place in the presence of His apostles 40 days after the Resurrection of Jesus. It is traditionally held to have occurred on Mount Olivet in Bethany.

MEMORIAL DAY—Monday, May 30—Also known as Decoration Day, Memorial Day is a legal holiday in all the northern states and in the territories, and is also observed by the armed forces. In 1868, General John A. Logan, Commander in Chief of the Grand Army of the Republic, issued an order designating the day as one in which the graves of soldiers would be decorated. The holiday was originally devoted to honoring the memory of those who fell in the Civil War, but is now also dedicated to the memory of the dead of all wars.

FIRST DAY OF SHABUOTH (Hebrew Pentecost)—Friday, June 3 (Sivan 6)—This festival, sometimes called the Feast of Weeks, or of Harvest, or of the First Fruits, falls fifty days after Passover and originally celebrated the end of the seven-week grain harvesting season. In later tradition, it also celebrated the giving of the Law to Moses on Mt. Sinai, and both aspects have come down to the present.

PENTECOST (Whitsunday)—June 5—This day commemorates the descent of the Holy Ghost upon the Apostles fifty days after the resurrection. The sermon by the Apostle Peter, which led to the baptism of 3000 who professed belief, originated the ceremonies that have since been followed. "Whitsunday" is believed to have come from "white Sunday" when, among the English, white robes were worn by those baptised on the day.

FLAG DAY—Tuesday, June 14—Flag Day is not a legal holiday but is universally observed throughout the country, particularly in schools. The date originates in the resolution adopted on June 14, 1777.

INDEPENDENCE DAY—Monday, July 4—The day of the adoption of the Declaration of Independence in 1776, celebrated in all states and territories. The observance began in the next year in Philadelphia.

LABOR DAY—Monday, Sept. 5—Observed the first Monday in September in all states and territories, Labor Day was first celebrated in New York in 1882 under the sponsorship of the Central Labor Union, following the suggestion of Peter J. McGuire, of the Knights of Labor, that the day be set aside in honor of labor.

FIRST DAY OF ROSH HASHANA (Jewish New Year)—Saturday, Sept. 24 (Tishri 1)—This day marks the beginning of the Jewish year 5709 and opens the Ten Days of Penitence, which close with Yom Kippur.

YOM KIPPUR (Day of Atonement)—Monday, Oct. 3 (Tishri 10)—This day marks the end of the Ten Days of Penitence that began with Rosh Hashana and is the holiest day of the Jewish year. It is described in *Leviticus* as the "Sabbath of Sabbaths," and synagogue services begin the preceding sundown, resume the following morning, and continue through

the day to sundown. Daily pursuits are refrained from, and the day is spent in prayers, fasting, and penitence.

FIRST DAY OF SUKKOTH (Feast of Tabernacles)—Saturday, Oct. 8 (Tishri 15)—This festival, also known as the Feast of the Ingathering, originally celebrated the fruit harvest, and the name comes from the booths or tabernacles in which the Jews lived during the harvest, although one tradition traces it to the shelters used by the Jews in their wandering through the wilderness. During the festival, many Jews build small huts in their back yards or on the roofs of houses.

COLUMBUS DAY—Wednesday, Oct. 12—A legal holiday in thirty-four states, commemorating the discovery of America by Columbus in 1492. Quite likely the first celebration of Columbus Day was that organized in 1792 by the Society of St. Tammany, or Columbian Order, more widely known as Tammany Hall. In 1892, a statue of Columbus was erected at the entrance to Central Park, just above Fifty-ninth Street, New York, and the plaza there was renamed Columbus Circle.

ELECTION DAY (In certain states)—Tuesday, Nov. 8—Since 1845, by Act of Congress, the first Tuesday after the first Monday in November is the date for choosing Presidential electors. State elections are also generally held on this day.

ARMISTICE DAY—Friday, Nov. 11—Commemorates the signing of the Armistice ending World War I in 1918. A Congressional resolution in 1926 directed the President to issue a proclamation annually for observance of the day. It is a legal holiday in many states and in others observance is asked by proclamation of the governors. As part of the day's observance, two minutes of silence are included in the ceremonies honoring the memories of the war dead. The most notable observance is at the Tomb of the Unknown Soldier in Arlington Cemetery, in Arlington, Va.

THANKSGIVING—Thursday, Nov. 24—Observed nationally on the fourth Thursday in November by Act of Congress (1941), the first such national proclamation having been issued by President Lincoln in 1863, on the urging of Mrs. Sarah J. Hale, editor of *Godey's Lady's Book*. Most Americans believe that the holiday dates back to the day of thanks ordered by Governor Bradford of Plymouth Colony in New England in 1621 but scholars point out that days of thanks stem from ancient times.

FIRST SUNDAY IN ADVENT—Nov. 27—Advent is the season in which the faithful must prepare themselves for the advent of the Saviour on Christmas. The four Sundays before Christmas are marked by special church services.

FIRST DAY OF HANUKKAH (Festival of Lights)—Friday, Dec. 16 (Kislev 25)—This festival was instituted by Judas Maccabaeus in 165 B.C. to celebrate the purification of the Temple of Jerusalem, which had been desecrated three years earlier by Antiochus Epiphanes, who set up a pagan altar and offered sacrifices to Zeus Olympius. In Jewish homes, a light is lighted the first night, and on each succeeding night of the eight-day festival, another is lighted.

CHRISTMAS (Feast of the Nativity)—Sunday, Dec. 25—The most important and the most widely celebrated holiday of the Christian year, it is observed as the

anniversary of the birth of Jesus. Christmas customs are centuries old. The mistletoe, for example, comes from the Druids, who, in hanging the mistletoe, hoped for peace and good fortune. Use of such plants as holly comes from the ancient belief that such plants blossomed at Christmas. Comparatively recent is the Christmas tree, first set up in Germany in the 17th century, and the use of candles on trees developed from the belief that candles appeared by miracle on the trees at Christmas. Colonial Manhattan Islanders introduced the name Santa Claus, a corruption of the Dutch name for the 4th Century Asia-Minor St. Nicholas.

Movable Holidays, 1949 to 1958

CHRISTIAN AND SECULAR

Year	Ash Wed.	Easter	Pentecost	Labor Day	Election Day	Thanks-giving	1st Sun. Advent
1949	Mar. 2	Apr. 17	June 5	Sept. 5	Nov. 8	Nov. 24	Nov. 27
1950	Feb. 22	Apr. 9	May 28	Sept. 4	Nov. 7	Nov. 23	Dec. 3
1951	Feb. 7	Mar. 25	May 13	Sept. 3	Nov. 6	Nov. 22	Dec. 2
1952	Feb. 27	Apr. 13	June 1	Sept. 1	Nov. 4	Nov. 27	Nov. 30
1953	Feb. 18	Apr. 5	May 24	Sept. 7	Nov. 3	Nov. 26	Nov. 29
1954	Mar. 3	Apr. 18	June 6	Sept. 6	Nov. 2	Nov. 25	Nov. 28
1955	Feb. 23	Apr. 10	May 29	Sept. 5	Nov. 8	Nov. 24	Nov. 27
1956	Feb. 15	Apr. 1	May 20	Sept. 3	Nov. 6	Nov. 22	Dec. 2
1957	Mar. 6	Apr. 21	June 9	Sept. 2	Nov. 5	Nov. 28	Dec. 1
1958	Feb. 19	Apr. 6	May 25	Sept. 1	Nov. 4	Nov. 27	Nov. 30

Shrove Tuesday: 1 day before Ash Wednesday.

Palm Sunday: 7 days before Easter.

Maundy Thursday: 3 days before Easter.

Good Friday: 2 days before Easter.

Holy Saturday: 1 day before Easter.

Ascension Day: 10 days before Pentecost.

Trinity Sunday: 7 days after Pentecost.

Corpus Christi: 11 days after Pentecost.

JEWISH

Year	Purim	1st day Passover	1st day Shabuoeth	1st day Rosh Hashana	Yom Kippur	1st Day Sukkoth	Simhath Torah	1st Day Hanukkah
1949	Mar. 15	Apr. 14	June 3	Sept. 24	Oct. 3	Oct. 8	Oct. 16	Dec. 16
1950	Mar. 3	Apr. 2	May 22	Sept. 12	Sept. 21	Sept. 26	Oct. 4	Dec. 4
1951	Mar. 22	Apr. 21	June 10	Oct. 1	Oct. 10	Oct. 15	Oct. 23	Dec. 24
1952	Mar. 11	Apr. 10	May 30	Sept. 20	Sept. 29	Oct. 4	Oct. 12	Dec. 13
1953	Mar. 1	Mar. 31	May 20	Sept. 10	Sept. 19	Sept. 24	Oct. 2	Dec. 2
1954	Mar. 19	Apr. 18	June 7	Sept. 28	Oct. 7	Oct. 12	Oct. 20	Dec. 20
1955	Mar. 8	Apr. 7	May 27	Sept. 17	Sept. 26	Oct. 1	Oct. 9	Dec. 10
1956	Feb. 26	Mar. 27	May 16	Sept. 6	Sept. 15	Sept. 20	Sept. 28	Nov. 29
1957	Mar. 17	Apr. 16	June 5	Sept. 26	Oct. 5	Oct. 10	Oct. 18	Dec. 18
1958	Mar. 6	Apr. 5	May 25	Sept. 15	Sept. 24	Sept. 29	Oct. 7	Dec. 7

Length of Jewish holidays (O=Orthodox, C=Conservative, R=Reform):

Passover: O & C, 8 days (holy days: first 2 and last 2); R, 7 days (holy days: first and last).

Shabuoeth: O & C, 2 days; R, 1 day.

Rosh Hashana: O & C, 2 days; R, 1 day.

Yom Kippur: All groups, 1 day.

Sukkoth: All groups, 7 days (holy days: O & C, first 2; R, first only). O & C ob-

serve two additional days: Shemini Atsereth (Eighth Day of the Feast) and Simhath Torah (Rejoicing of the Law). R observes Shemini Atsereth but not Simhath Torah.

Hanukkah: All groups, 8 days.

NOTE: All holidays begin at sundown on the evening before the date given.

SPORTS ORGANIZATIONS AND INFORMATION BUREAUS

- ALL-AMERICA FOOTBALL CONFERENCE. Empire State Bldg., New York 1, N. Y.
- ALL-AMERICAN GIRLS BASEBALL LEAGUE. 462 Wrigley Bldg., Chicago 11, Ill.
- AMATEUR ATHLETIC UNION OF THE U. S. 233 Broadway, New York 7, N. Y.
- AMATEUR BICYCLE LEAGUE OF AMERICA. 4233 - 205th St., Bayside, N. Y.
- AMATEUR FENCERS LEAGUE OF AMERICA. Room 3406, 122 E. 42d St., New York 17, N. Y.
- AMATEUR HOCKEY ASSN. OF THE U. S. Madison Square Garden, 307 W. 49th St., New York 19, N. Y.
- AMATEUR SKATING UNION OF THE U. S. 18093 Ilene St., Detroit 21, Mich.
- AMATEUR SOFTBALL ASSN. OF AMERICA. Municipal Pier, St. Petersburg, Fla.
- AMATEUR TRAPSHOOTING ASSN. Vandalia, Ohio
- AMERICAN AUTOMOBILE ASSN. Pennsylvania Ave. at 17th St., N. W., Washington 6, D. C.
- AMERICAN BADMINTON ASSN. 47 Colburn Rd., Wellesley Hills 82, Mass.
- AMERICAN BASKETBALL LEAGUE. 120 Wall St., New York 5.
- AMERICAN BOWLING CONGRESS. 2200 N. Third St., Milwaukee 12, Wis.
- AMERICAN CANOE ASSN. Skyline Garden, Bldg. 8-P, North Arlington, N. J.
- AMERICAN FOOTBALL LEAGUE. 9 Rockefeller Plaza, New York 20, N. Y.
- AMERICAN HOCKEY LEAGUE. Empire State Bldg., New York 1, N. Y.
- AMERICAN HORSE SHOWS ASSN. 90 Broad St., New York 4.
- AMERICAN KENNEL CLUB. 221 Fourth Ave., New York 3.
- AMERICAN LAWN BOWLING ASSN. 10276 Orton Ave., Los Angeles 25, Calif.
- AMERICAN LEAGUE SERVICE BUREAU (Baseball). 310 S. Michigan Ave., Chicago 4, Ill.
- AMERICAN MOTORCYCLE ASSN. Box 1049, Columbus, Ohio
- AMERICAN POWER BOAT ASSN. 3733 Barlum Tower, Detroit 26, Mich.
- AMERICAN RACING DRIVERS CLUB (midget auto racing). 345 Calhoun Ave., New York 61, N. Y.
- ASSN. OF PROFESSIONAL BALL PLAYERS OF AMERICA. 524 S. Spring St., Los Angeles 13, Calif.
- BASEBALL COMMISSIONER A. B. CHANDLER. 2601 Carew Tower, Cincinnati 2, Ohio
- BASKETBALL ASSN. OF AMERICA. Empire State Bldg., New York 1, N. Y.
- BILLIARD ASSN. OF AMERICA. 629 S. Wabash Ave., Chicago 5, Ill.
- EASTERN COLLEGE ATHLETIC CONFERENCE. Biltmore Hotel, New York 17, N. Y.
- ELIAS BASEBALL BUREAU, 11 West 42d St., New York 18, N. Y.
- INTERCOLLEGIATE A.A.A.A. Biltmore Hotel, New York 17.
- INTERNATIONAL GAME FISH ASSN. American Museum of Natural History, New York 24, N. Y.
- NATL. ARCHERY ASSN. OF THE U. S. 2 Grace St., Old Greenwich, Conn.
- NATL. ASSN. OF AMATEUR OARSMEN. 5 Union Sq., New York 3, N. Y.
- NATL. ASSN. OF ANGLING AND CASTING CLUBS. 222 Papin Ave., Webster Groves 19, Mo.
- NATL. ASSN. OF PROFESSIONAL BASEBALL LEAGUES (Minors). 696 E. Broad St., Columbus 15, Ohio
- NATL. ASSN. OF STATE RACING COMMISSIONERS. Box 156, Lexington, Ky.
- NATL. BASEBALL CONGRESS. Wichita 1, Kans.
- NATL. BASKETBALL LEAGUE. Box 809, Lafayette, Ind.
- NATL. BOXING ASSN. Room 2053, New Municipal Center, Washington 1, D. C.
- NATL. COLLEGIATE ATHLETIC ASSN. Hotel Sherman, Chicago 1, Ill.
- NATL. DUCK PIN BOWLING CONGRESS. 1420 New York Ave., N. W., Washington 5, D. C.
- NATL. FOOTBALL LEAGUE. 1518 Walnut St., Philadelphia 2.
- NATL. HOCKEY LEAGUE. Sun Life Bldg., Montreal, Quebec.
- NATL. HORSESHOE PITCHERS ASSN. OF AMERICA. 912 Melrose Ave., Santa Cruz, Calif.
- NATL. LEAGUE SERVICE BUREAU (Baseball). 30 Rockefeller Plaza, New York 20, N. Y.
- NATL. RIFLE ASSN. OF AMERICA. Scott Circle, Washington 6, D. C.
- NATL. SKEET ASSN. 1600 Rhode Is. Ave., Washington 6, D. C.
- NATL. SKI ASSN. Box 33, Barre, Mass.
- NATL. SQUASH RACQUETS ASSN. Room 335, 40 Worth St., New York 13, N. Y.
- NATL. SQUASH TENNIS ASSN. 131 E. 15th St., New York 3.
- NATL. STEEPLECHASE AND HUNT ASSN. 250 Park Ave., New York 17, N. Y.
- NEW YORK RACING ASSNS. SERVICE BUREAU. 250 Park Ave., New York 17, N. Y.
- NEW YORK STATE ATHLETIC (BOXING) COMMISSION. 80 Centre St., New York 13, N. Y.
- NORTH AMERICAN YACHT RACING UNION. 37 West 44th St., New York 18, N. Y.
- PROFESSIONAL GOLFERS' ASSN. OF AMERICA. 134 N. La Salle St., Chicago 2, Ill.
- PROFESSIONAL LAWN TENNIS ASSN. OF THE U. S. 51 Columbus Ave., New York 23, N. Y.
- ROLLER SKATING RINK OPERATORS ASSN. OF THE U. S. Box 857, Detroit 31, Mich.
- THE JOCKEY CLUB. 250 Park Ave., New York 17, N. Y.
- THOROUGHbred RACING ASSNS. OF THE U. S. 400 Madison Ave., New York 17, N. Y.
- U. S. AMATEUR ROLLER SKATING ASSN. 120 West 42d St., New York 18, N. Y.
- U. S. CHESS FEDERATION. 208 S. La Salle St., Chicago 4, Ill.
- U. S. FIELD HOCKEY ASSN. 107 School Lane, Philadelphia 44, Pa.
- U. S. FIGURE SKATING ASSN. 1122 Leader Bldg., Cleveland 14, Ohio
- U. S. FISH AND WILDLIFE SERVICE. 222 N. Bank Dr., Chicago 54, Ill.
- U. S. GOLF ASSN. 73 E. 57th St., New York 22, N. Y.
- U. S. HOCKEY LEAGUE. 524 Roanoke Bldg., Minneapolis 2, Minn.
- U. S. INTERCOLLEGIATE LACROSSE ASSN. 3317 Richmond Ave., Baltimore 13, Md.
- U. S. LAWN TENNIS ASSN. 120 Broadway, New York 5, N. Y.
- U. S. OLYMPIC ASSN. Biltmore Hotel, New York 17, N. Y.
- U. S. PADDLE TENNIS ASSN. 111 Broadway, New York 6, N. Y.
- U. S. POLO ASSN. 250 Park Ave., New York 17, N. Y.
- U. S. SOCCER FOOTBALL ASSN. 320 Fifth Ave., New York 1.
- U. S. TABLE TENNIS ASSN. 2501 Pocahontas Ave., Rock Hill Village 17, Mo.
- U. S. TROTTING ASSN. 525 Main St., Hartford 3, Conn.
- WOMAN'S INTERNATIONAL BOWLING CONGRESS. 85 E. Gay St., Columbus 15, Ohio

SPORTS

Edited by

PETER BRANDWEIN

Of The New York Times Sports Staff



BASEBALL

THE POPULAR TRADITION that baseball was invented by Abner Doubleday at Cooperstown, N. Y., in 1839, has been enshrined in the Hall of Fame and National Museum of Baseball erected in that town, but research has proved that a game called "Baseball" was played in this country and England before 1839. However, the first team of baseball as we know it was played at the Polo Grounds, Hoboken, N. J., on June 19, 1846, between the Knickerbockers and the New York Nine. There was a gradual growth of baseball and an improvement in equipment and playing skill in the next twenty years. Soldiers returning home from the Civil War spread over the country the game they had learned to play in their camps.

Historians have it that the first pitcher to throw a curve was William A. (Candy) Cummings in 1867. The Cincinnati Red Stockings were the first all-professional

team and in 1869 they played 64 games without a loss. The standard ball of the same size and weight, still the rule, was adopted in 1872. The first catcher's mask was worn in 1875. The National League was organized in 1876. The first chest protector was donned in 1885. The three-strike rule was put on the books in 1887 and the four-ball ticket to first base came in 1889. The pitching distance, formerly 50 feet, was lengthened to 60 feet 6 inches in 1893 and the rules have been only slightly modified since that time.

The American League, under the vigorous leadership of B. B. Johnson, blossomed forth as a major league in 1901. Judge Kenesaw Mountain Landis, by action of the two major leagues, became Commissioner of Baseball in 1921 and, upon his death (1944), Albert B. Chandler, former United States Senator from Kentucky, was elected to that office (1945).

PROFESSIONAL BASEBALL GOVERNMENT

NATIONAL LEAGUE—AMERICAN LEAGUE—NATIONAL ASSOCIATION

Albert B. Chandler, Commissioner
Walter W. Mulbry, Secretary-Treasurer
2601 Carew Tower, Cincinnati 2, Ohio

NATIONAL LEAGUE

Ford C. Frick
President-Secretary-Treasurer
Office: 30 Rockefeller Plaza,
New York 20, N. Y.
Chairman of the Board, John A. Heydler
Public Relations Bureau: Charles M. Segar, Manager

AMERICAN LEAGUE

William Harridge
President-Secretary-Treasurer
Office: 310 South Michigan Ave.,
Chicago 4, Ill.
Public Relations Bureau: Earl J. Hilligan, Manager

NATIONAL ASSOCIATION

George M. Trautman
President-Treasurer
696 East Broad St., Columbus 15, Ohio
Vice President—Clarence H. Rowland
Publicity Director: Robert L. Finch

Executive Committee

Clarence H. Rowland (Chairman)
Herman D. White, Earl Mann

Umpire Adviser

W. B. Carpenter, 2700 Vine St.,
Cincinnati 19, Ohio

Baseball Statistics

Source: The Elias Baseball Bureau, New York City.

Record of World Series Games

(No series in 1904.)

Figures in parentheses indicate number of victories for each club. Pitchers named are winner and loser, respectively.

1903—BOSTON A. L. (5) vs. PITTSBURGH N. L. (3)

(Not under Brush rules)

Managers—J. J. Collins, Boston; F. C. Clarke, Pittsburgh.

Oct. 1—Pittsburgh (Phillippe).....	7	Boston (Young).....	3	At Boston
Oct. 2—Boston (Dinneen).....	3	Pittsburgh (Leever).....	0	At Boston
Oct. 3—Pittsburgh (Phillippe).....	4	Boston (Hughes).....	2	At Boston
Oct. 6—Pittsburgh (Phillippe).....	5	Boston (Dinneen).....	4	At Pittsburgh
Oct. 7—Boston (Young).....	11	Pittsburgh (Kennedy).....	2	At Pittsburgh
Oct. 8—Boston (Dinneen).....	6	Pittsburgh (Leever).....	3	At Pittsburgh
Oct. 10—Boston (Young).....	7	Pittsburgh (Phillippe).....	3	At Pittsburgh
Oct. 13—Boston (Dinneen).....	3	Pittsburgh (Phillippe).....	0	At Boston

1905—NEW YORK N. L. (4) vs. PHILADELPHIA A. L. (1)

Managers—John J. McGraw, New York; Connie Mack, Philadelphia.

Oct. 9—New York (Mathewson).....	3	Philadelphia (Plank).....	0	At Philadelphia
Oct. 10—Philadelphia (Bender).....	3	New York (McGinnity).....	0	At New York
Oct. 12—New York (Mathewson).....	9	Philadelphia (Coakley).....	0	At Philadelphia
Oct. 13—New York (McGinnity).....	1	Philadelphia (Plank).....	0	At New York
Oct. 14—New York (Mathewson).....	2	Philadelphia (Bender).....	0	At New York

1906—CHICAGO A. L. (4) vs. CHICAGO N. L. (2)

Managers—Fielder Jones, Chicago A. L.; Frank L. Chance, Chicago N. L.

Oct. 9—Chicago A (Altrock).....	2	Chicago N (Brown).....	1	At Chicago Nat. Pk.
Oct. 10—Chicago N (Reulbach).....	7	Chicago A (White).....	1	At Chicago Am. Pk.
Oct. 11—Chicago A (Walsh).....	3	Chicago N (Pfister).....	0	At Chicago Nat. Pk.
Oct. 12—Chicago N (Brown).....	1	Chicago A (Altrock).....	0	At Chicago Am. Pk.
Oct. 13—Chicago A (Walsh).....	8	Chicago N (Pfister).....	6	At Chicago Nat. Pk.
Oct. 14—Chicago A (White).....	8	Chicago N (Brown).....	3	At Chicago Am. Pk.

1907—CHICAGO N. L. (4) vs. DETROIT A. L. (0)

Managers—Frank L. Chance, Chicago; Hugh Jennings, Detroit.

Oct. 8—Chicago (tie).....	3	Detroit (tie).....	3	At Chicago (12 inn.)
Oct. 9—Chicago (Pfister).....	3	Detroit (Mullin).....	1	At Chicago
Oct. 10—Chicago (Reulbach).....	5	Detroit (Siever).....	1	At Chicago
Oct. 11—Chicago (Overall).....	6	Detroit (Donovan).....	1	At Detroit
Oct. 12—Chicago (Brown).....	2	Detroit (Mullin).....	0	At Detroit

1908—CHICAGO N. L. (4) vs. DETROIT A. L. (1)

Managers—Frank L. Chance, Chicago; Hugh Jennings, Detroit.

Oct. 10—Chicago (Brown).....	10	Detroit (Summers).....	6	At Detroit
Oct. 11—Chicago (Overall).....	6	Detroit (Donovan).....	1	At Chicago
Oct. 12—Detroit (Mullin).....	8	Chicago (Pfister).....	3	At Chicago
Oct. 13—Chicago (Brown).....	3	Detroit (Summers).....	0	At Detroit
Oct. 14—Chicago (Overall).....	2	Detroit (Donovan).....	0	At Detroit

1909—PITTSBURGH N. L. (4) vs. DETROIT A. L. (3)

Managers—Fred C. Clarke, Pittsburgh; Hugh Jennings, Detroit.

Oct. 8—Pittsburgh (Adams).....	4	Detroit (Mullin).....	1	At Pittsburgh
Oct. 9—Detroit (Donovan).....	7	Pittsburgh (Camnitz).....	2	At Pittsburgh
Oct. 11—Pittsburgh (Maddox).....	8	Detroit (Summers).....	6	At Detroit
Oct. 12—Detroit (Mullin).....	5	Pittsburgh (Leifield).....	0	At Detroit
Oct. 13—Pittsburgh (Adams).....	8	Detroit (Summers).....	4	At Pittsburgh
Oct. 14—Detroit (Mullin).....	5	Pittsburgh (Willis).....	4	At Detroit
Oct. 16—Pittsburgh (Adams).....	8	Detroit (Donovan).....	0	At Detroit

1910—PHILADELPHIA A. L. (4) vs. CHICAGO N. L. (1)

Managers—Connie Mack, Philadelphia; Frank L. Chance, Chicago.

17—Philadelphia (Bender).....	4	Chicago (Overall).....	1	At Philadelphia
18—Philadelphia (Coombs).....	9	Chicago (Brown).....	3	At Philadelphia
20—Philadelphia (Coombs).....	12	Chicago (McIntire).....	5	At Chicago
22—Chicago (Brown).....	4	Philadelphia (Bender).....	3	At Chicago (10 inn.)
23—Philadelphia (Coombs).....	7	Chicago (Brown).....	2	At Chicago

1911—PHILADELPHIA A. L. (4) vs. NEW YORK N. L. (2)

Managers—Connie Mack, Philadelphia; John J. McGraw, New York.

14—New York (Mathewson).....	2	Philadelphia (Bender).....	1	At New York
16—Philadelphia (Plank).....	3	New York (Marquard).....	1	At Philadelphia
17—Philadelphia (Coombs).....	3	New York (Mathewson).....	2	At New York (11 inn.)
24—Philadelphia (Bender).....	4	New York (Mathewson).....	2	At Philadelphia
25—New York (Crandall).....	4	Philadelphia (Plank).....	3	At New York (10 inn.)
26—Philadelphia (Bender).....	13	New York (Ames).....	2	At Philadelphia

1912—BOSTON A. L. (4) vs. NEW YORK N. L. (3)

Managers—J. Garland Stahl, Boston; John J. McGraw, New York.

8—Boston (Wood).....	4	New York (Tesreau).....	3	At New York
9—Boston (tie).....	6	New York (tie).....	6	At Boston (11 inn.)
10—New York (Marquard).....	2	Boston (O'Brien).....	1	At Boston
11—Boston (Wood).....	3	New York (Tesreau).....	1	At New York
12—Boston (Bedient).....	2	New York (Mathewson).....	1	At Boston
14—New York (Marquard).....	5	Boston (O'Brien).....	2	At New York
15—New York (Tesreau).....	11	Boston (Wood).....	4	At Boston
16—Boston (Wood).....	3	New York (Mathewson).....	2	At Boston (10 inn.)

1913—PHILADELPHIA A. L. (4) vs. NEW YORK N. L. (1)

Managers—Connie Mack, Philadelphia; John J. McGraw, New York.

7—Philadelphia (Bender).....	6	New York (Marquard).....	4	At New York
8—New York (Mathewson).....	3	Philadelphia (Plank).....	0	At Philadelphia (10 inn.)
9—Philadelphia (Bush).....	8	New York (Tesreau).....	2	At New York
10—Philadelphia (Bender).....	6	New York (Demaree).....	5	At Philadelphia
11—Philadelphia (Plank).....	3	New York (Mathewson).....	1	At New York

1914—BOSTON N. L. (4) vs. PHILADELPHIA A. L. (0)

Managers—George T. Stallings, Boston; Connie Mack, Philadelphia.

9—Boston (Rudolph).....	7	Philadelphia (Bender).....	1	At Philadelphia
10—Boston (James).....	1	Philadelphia (Plank).....	0	At Philadelphia
12—Boston (James).....	5	Philadelphia (Bush).....	4	At Boston (12 inn.)
13—Boston (Rudolph).....	3	Philadelphia (Shawkey).....	1	At Boston

1915—BOSTON A. L. (4) vs. PHILADELPHIA N. L. (1)

Managers—William Carrigan, Boston; Patrick J. Moran, Philadelphia.

8—Philadelphia (Alexander).....	3	Boston (Shore).....	1	At Philadelphia
9—Boston (Foster).....	2	Philadelphia (Mayer).....	1	At Philadelphia
11—Boston (Leonard).....	2	Philadelphia (Alexander).....	1	At Boston
12—Boston (Shore).....	2	Philadelphia (Chalmers).....	1	At Boston
13—Boston (Foster).....	5	Philadelphia (Rixey).....	4	At Philadelphia

1916—BOSTON A. L. (4) vs. BROOKLYN N. L. (1)

Managers—William Carrigan, Boston; Wilbert J. Robinson, Brooklyn.

7—Boston (Shore).....	6	Brooklyn (Marquard).....	5	At Boston
9—Boston (Ruth).....	2	Brooklyn (Smith).....	1	At Boston (14 inn.)
0—Brooklyn (Coombs).....	4	Boston (Mays).....	3	At Brooklyn
1—Boston (Leonard).....	6	Brooklyn (Marquard).....	2	At Brooklyn
2—Boston (Shore).....	4	Brooklyn (Pfeffer).....	1	At Boston

1917—CHICAGO A. L. (4) NEW YORK N. L. (2)

Managers—Clarence H. Rowland, Chicago; John J. McGraw, New York.

6—Chicago (Cicotte).....	2	New York (Sallee).....	1	At Chicago
7—Chicago (Faber).....	7	New York (Anderson).....	2	At Chicago
0—New York (Benton).....	2	Chicago (Cicotte).....	0	At New York
1—New York (Schupp).....	5	Chicago (Faber).....	0	At New York
3—Chicago (Faber).....	8	New York (Sallee).....	5	At Chicago
5—Chicago (Faber).....	4	New York (Benton).....	2	At New York

1918—BOSTON A. L. (4) vs. CHICAGO N. L. (2)

Managers—E. G. Barrow, Boston; Fred L. Mitchell, Chicago.

Sept. 5—Boston (Ruth).....	1	Chicago (Vaughn).....	0	At Chicago
Sept. 6—Chicago (Tyler).....	3	Boston (Bush).....	1	At Chicago
Sept. 7—Boston (Mays).....	2	Chicago (Vaughn).....	1	At Chicago
Sept. 9—Boston (Ruth).....	3	Chicago (Douglas).....	2	At Boston
Sept. 10—Chicago (Vaughn).....	3	Boston (Jones).....	0	At Boston
Sept. 11—Boston (Mays).....	2	Chicago (Tyler).....	1	At Boston

1919—CINCINNATI N. L. (5) vs. CHICAGO A. L. (3)

Managers—Patrick J. Moran, Cincinnati; William Gleason, Chicago.

Oct. 1—Cincinnati (Ruether).....	9	Chicago (Cicotte).....	1	At Cincinnati
Oct. 2—Cincinnati (Sallee).....	4	Chicago (Williams).....	2	At Cincinnati
Oct. 3—Chicago (Kerr).....	3	Cincinnati (Fisher).....	0	At Chicago
Oct. 4—Cincinnati (Ring).....	2	Chicago (Cicotte).....	0	At Chicago
Oct. 6—Cincinnati (Eller).....	5	Chicago (Williams).....	0	At Chicago
Oct. 7—Chicago (Kerr).....	5	Cincinnati (Ring).....	4	At Cincinnati
Oct. 8—Chicago (Cicotte).....	4	Cincinnati (Sallee).....	1	At Cincinnati
Oct. 9—Cincinnati (Eller).....	10	Chicago (Williams).....	5	At Chicago (10 inn.)

1920—CLEVELAND A. L. (5) vs. BROOKLYN N. L. (2)

Managers—Tris Speaker, Cleveland; Wilbert J. Robinson, Brooklyn.

Oct. 5—Cleveland (Coveleskie).....	3	Brooklyn (Marquard).....	1	At Brooklyn
Oct. 6—Brooklyn (Grimes).....	3	Cleveland (Bagby).....	0	At Brooklyn
Oct. 7—Brooklyn (Smith).....	2	Cleveland (Caldwell).....	1	At Brooklyn
Oct. 9—Cleveland (Coveleskie).....	5	Brooklyn (Cadore).....	1	At Cleveland
Oct. 10—Cleveland (Bagby).....	8	Brooklyn (Grimes).....	1	At Cleveland
Oct. 11—Cleveland (Mails).....	1	Brooklyn (Smith).....	0	At Cleveland
Oct. 12—Cleveland (Coveleskie).....	3	Brooklyn (Grimes).....	0	At Cleveland

1921—NEW YORK N. L. (5) vs. NEW YORK A. L. (3)

Managers—John J. McGraw, New York N. L.; Miller J. Huggins, New York A. L.

Oct. 5—New York A (Mays).....	3	New York N (Nehf).....	0	At Polo Grounds
Oct. 6—New York A (Hoyt).....	3	New York N (Douglas).....	0	At Polo Grounds
Oct. 7—New York N (Barnes).....	13	New York A (Quinn).....	5	At Polo Grounds
Oct. 9—New York N (Douglas).....	4	New York A (Mays).....	2	At Polo Grounds
Oct. 10—New York A (Hoyt).....	3	New York N (Nehf).....	1	At Polo Grounds
Oct. 11—New York N (Barnes).....	8	New York A (Shawkey).....	5	At Polo Grounds
Oct. 12—New York N (Douglas).....	2	New York A (Mays).....	1	At Polo Grounds
Oct. 13—New York N (Nehf).....	1	New York A (Hoyt).....	0	At Polo Grounds

1922—NEW YORK N. L. (4) vs. NEW YORK A. L. (0)

Managers—John J. McGraw, New York N. L.; Miller J. Huggins, New York A. L.

Oct. 4—New York N (Ryan).....	3	New York A (Bush).....	2	At Polo Grounds
Oct. 5—New York N (tie).....	3	New York A (tie).....	3	At Polo Grounds (10 inn.)
Oct. 6—New York N (Scott).....	3	New York A (Hoyt).....	0	At Polo Grounds
Oct. 7—New York N (McQuillan).....	4	New York A (Mays).....	3	At Polo Grounds
Oct. 8—New York N (Nehf).....	5	New York A (Bush).....	3	At Polo Grounds

1923—NEW YORK A. L. (4) vs. NEW YORK N. L. (2)

Managers—Miller J. Huggins, New York A. L.; John J. McGraw, New York N. L.

Oct. 10—New York N (Ryan).....	5	New York A (Bush).....	4	At Yankee Stadium
Oct. 11—New York A (Pennock).....	4	New York N (McQuillan).....	2	At Polo Grounds
Oct. 12—New York N (Nehf).....	1	New York A (Jones).....	0	At Yankee Stadium
Oct. 13—New York A (Shawkey).....	8	New York N (Scott).....	4	At Polo Grounds
Oct. 14—New York A (Bush).....	8	New York N (Bentley).....	1	At Yankee Stadium
Oct. 15—New York A (Pennock).....	6	New York N (Nehf).....	4	At Polo Grounds

1924—WASHINGTON A. L. (4) vs. NEW YORK N. L. (3)

Managers—Stanley R. Harris, Washington; John J. McGraw, New York.

Oct. 4—New York (Nehf).....	4	Washington (Johnson).....	3	At Washington (12 inn.)
Oct. 5—Washington (Zachary).....	4	New York (Bentley).....	3	At Washington
Oct. 6—New York (McQuillan).....	6	Washington (Marberry).....	4	At New York
Oct. 7—Washington (Mogridge).....	7	New York (Barnes).....	4	At New York
Oct. 8—New York (Bentley).....	6	Washington (Johnson).....	2	At New York
Oct. 9—Washington (Zachary).....	2	New York (Nehf).....	1	At Washington
Oct. 10—Washington (Johnson).....	4	New York (Bentley).....	3	At Washington (12 inn.)

1925—PITTSBURGH N. L. (4) vs. WASHINGTON A. L. (3)

Managers—William B. McKechnie, Pittsburgh; Stanley R. Harris, Washington.

7—Washington (Johnson).....	4	Pittsburgh (Meadows).....	1	At Pittsburgh
8—Pittsburgh (Aldridge).....	3	Washington (Coveleskie).....	2	At Pittsburgh
10—Washington (Ferguson).....	4	Pittsburgh (Kremer).....	3	At Washington
11—Washington (Johnson).....	4	Pittsburgh (Yde).....	0	At Washington
12—Pittsburgh (Aldridge).....	6	Washington (Coveleskie).....	3	At Washington
13—Pittsburgh (Kremer).....	3	Washington (Ferguson).....	2	At Pittsburgh
15—Pittsburgh (Kremer).....	9	Washington (Johnson).....	7	At Pittsburgh

1926—ST. LOUIS N. L. (4) vs. NEW YORK A. L. (3)

Managers—Rogers Hornsby, St. Louis; Miller J. Huggins, New York.

2—New York (Pennock).....	2	St. Louis (Sherdel).....	1	At New York
3—St. Louis (Alexander).....	6	New York (Shocker).....	2	At New York
5—St. Louis (Haines).....	4	New York (Ruether).....	0	At St. Louis
6—New York (Hoyt).....	10	St. Louis (Reinhart).....	5	At St. Louis
7—New York (Pennock).....	3	St. Louis (Sherdel).....	2	At St. Louis (10 inn.)
9—St. Louis (Alexander).....	10	New York (Shawkey).....	2	At New York
10—St. Louis (Haines).....	3	New York (Hoyt).....	2	At New York

1927—NEW YORK A. L. (4) vs. PITTSBURGH N. L. (0)

Managers—Miller J. Huggins, New York; Owen J. Bush, Pittsburgh.

5—New York (Hoyt).....	5	Pittsburgh (Kremer).....	4	At Pittsburgh
6—New York (Pipgras).....	6	Pittsburgh (Aldridge).....	2	At Pittsburgh
7—New York (Pennock).....	8	Pittsburgh (Meadows).....	1	At New York
8—New York (Moore).....	4	Pittsburgh (Miljus).....	3	At New York

1928—NEW YORK A. L. (4) vs. ST. LOUIS N. L. (0)

Managers—Miller J. Huggins, New York; William B. McKechnie, St. Louis.

4—New York (Hoyt).....	4	St. Louis (Sherdel).....	1	At New York
5—New York (Pipgras).....	9	St. Louis (Alexander).....	3	At New York
7—New York (Zachary).....	7	St. Louis (Haines).....	3	At St. Louis
9—New York (Hoyt).....	7	St. Louis (Sherdel).....	3	At St. Louis

1929—PHILADELPHIA A. L. (4) vs. CHICAGO N. L. (1)

Managers—Connie Mack, Philadelphia; Joseph V. McCarthy, Chicago.

8—Philadelphia (Ehmke).....	3	Chicago (Root).....	1	At Chicago
9—Philadelphia (Earnshaw).....	9	Chicago (Malone).....	3	At Chicago
11—Chicago (Bush).....	3	Philadelphia (Earnshaw).....	1	At Philadelphia
12—Philadelphia (Rommel).....	10	Chicago (Blake).....	8	At Philadelphia
14—Philadelphia (Walberg).....	3	Chicago (Malone).....	2	At Philadelphia

1930—PHILADELPHIA A. L. (4) vs. ST. LOUIS N. L. (2)

Managers—Connie Mack, Philadelphia; Charles E. Street, St. Louis.

1—Philadelphia (Grove).....	5	St. Louis (Grimes).....	2	At Philadelphia
2—Philadelphia (Earnshaw).....	6	St. Louis (Rhem).....	1	At Philadelphia
4—St. Louis (Hallahan).....	5	Philadelphia (Walberg).....	0	At St. Louis
5—St. Louis (Haines).....	3	Philadelphia (Grove).....	1	At St. Louis
6—Philadelphia (Grove).....	2	St. Louis (Grimes).....	0	At St. Louis
8—Philadelphia (Earnshaw).....	8	St. Louis (Hallahan).....	1	At Philadelphia

1931—ST. LOUIS N. L. (4) vs. PHILADELPHIA A. L. (3)

Managers—Charles E. Street, St. Louis; Connie Mack, Philadelphia.

1—Philadelphia (Grove).....	6	St. Louis (Derringer).....	2	At St. Louis
2—St. Louis (Hallahan).....	2	Philadelphia (Earnshaw).....	0	At St. Louis
5—St. Louis (Grimes).....	5	Philadelphia (Grove).....	2	At Philadelphia
6—Philadelphia (Earnshaw).....	3	St. Louis (Johnson).....	0	At Philadelphia
7—St. Louis (Hallahan).....	5	Philadelphia (Hoyt).....	1	At Philadelphia
9—Philadelphia (Grove).....	8	St. Louis (Derringer).....	1	At St. Louis
10—St. Louis (Grimes).....	4	Philadelphia (Earnshaw).....	2	At St. Louis

1932—NEW YORK A. L. (4) vs. CHICAGO N. L. (0)

Managers—Joseph V. McCarthy, New York; Charles J. Grimm, Chicago.

28—New York (Ruffing).....	12	Chicago (Bush).....	6	At New York
29—New York (Gomez).....	5	Chicago (Warneke).....	2	At New York
1—New York (Pipgras).....	7	Chicago (Root).....	5	At Chicago
2—New York (Moore).....	13	Chicago (May).....	6	At Chicago

1933—NEW YORK N. L. (4) vs. WASHINGTON A. L. (1)

Managers—William H. Terry, New York; Joseph E. Cronin, Washington.

Oct. 3—New York (Hubbell).....	4	Washington (Stewart).....	2	At New York
Oct. 4—New York (Schumacher).....	6	Washington (Crowder).....	1	At New York
Oct. 5—Washington (Whitehill).....	4	New York (Fitzsimmons).....	0	At Washington
Oct. 6—New York (Hubbell).....	2	Washington (Weaver).....	1	At Washington (11 inn.)
Oct. 7—New York (Luque).....	4	Washington (Russell).....	3	At Washington (10 inn.)

1934—ST. LOUIS N. L. (4) vs. DETROIT A. L. (3)

Managers—Frank F. Frisch, St. Louis; Gordon S. Cochrane, Detroit.

Oct. 3—St. Louis (J. Dean).....	8	Detroit (Crowder).....	3	At Detroit
Oct. 4—Detroit (Rowe).....	3	St. Louis (W. Walker).....	2	At Detroit (12 inn.)
Oct. 5—St. Louis (P. Dean).....	4	Detroit (Bridges).....	1	At St. Louis
Oct. 6—Detroit (Auker).....	10	St. Louis (W. Walker).....	4	At St. Louis
Oct. 7—Detroit (Bridges).....	3	St. Louis (J. Dean).....	1	At St. Louis
Oct. 8—St. Louis (P. Dean).....	4	Detroit (Rowe).....	3	At Detroit
Oct. 9—St. Louis (J. Dean).....	11	Detroit (Auker).....	0	At Detroit

1935—DETROIT A. L. (4) vs. CHICAGO N. L. (2)

Managers—Gordon S. Cochrane, Detroit; Charles J. Grimm, Chicago.

Oct. 2—Chicago (Warneke).....	3	Detroit (Rowe).....	0	At Detroit
Oct. 3—Detroit (Bridges).....	8	Chicago (Root).....	3	At Detroit
Oct. 4—Detroit (Rowe).....	6	Chicago (French).....	5	At Chicago (11 inn.)
Oct. 5—Detroit (Crowder).....	2	Chicago (Carleton).....	1	At Chicago
Oct. 6—Chicago (Warneke).....	3	Detroit (Rowe).....	1	At Chicago
Oct. 7—Detroit (Bridges).....	4	Chicago (French).....	3	At Detroit

1936—NEW YORK A. L. (4) vs. NEW YORK N. L. (2)

Managers—Joseph V. McCarthy, Yankees; William H. Terry, Giants.

Sept. 30—Giants (Hubbell).....	6	Yankees (Ruffing).....	1	At Polo Grounds
Oct. 2—Yankees (Gomez).....	18	Giants (Schumacher).....	4	At Polo Grounds
Oct. 3—Yankees (Hadley).....	2	Giants (Fitzsimmons).....	1	At Yankee Stadium
Oct. 4—Yankees (Pearson).....	5	Giants (Hubbell).....	2	At Yankee Stadium
Oct. 5—Giants (Schumacher).....	5	Yankees (Malone).....	4	At Yankee Stadium (10 inn.)
Oct. 6—Yankees (Gomez).....	13	Giants (Fitzsimmons).....	5	At Polo Grounds

1937—NEW YORK A. L. (4) vs. NEW YORK N. L. (1)

Managers—Joseph V. McCarthy, Yankees; William H. Terry, Giants.

Oct. 6—Yankees (Gomez).....	8	Giants (Hubbell).....	1	At Yankee Stadium
Oct. 7—Yankees (Ruffing).....	8	Giants (Melton).....	1	At Yankee Stadium
Oct. 8—Yankees (Pearson).....	5	Giants (Schumacher).....	1	At Polo Grounds
Oct. 9—Giants (Hubbell).....	7	Yankees (Hadley).....	3	At Polo Grounds
Oct. 10—Yankees (Gomez).....	4	Giants (Melton).....	2	At Polo Grounds

1938—NEW YORK A. L. (4) vs. CHICAGO N. L. (0)

Managers—Joseph V. McCarthy, New York; Charles L. Hartnett, Chicago.

Oct. 5—New York (Ruffing).....	3	Chicago (Lee).....	1	At Chicago
Oct. 6—New York (Gomez).....	6	Chicago (Dean).....	3	At Chicago
Oct. 8—New York (Pearson).....	5	Chicago (Bryant).....	2	At New York
Oct. 9—New York (Ruffing).....	8	Chicago (Lee).....	3	At New York

1939—NEW YORK A. L. (4) vs. CINCINNATI N. L. (0)

Managers—Joseph V. McCarthy, New York; William B. McKechnie, Cincinnati.

Oct. 4—New York (Ruffing).....	2	Cincinnati (Derringer).....	1	At New York
Oct. 5—New York (Pearson).....	4	Cincinnati (Walters).....	0	At New York
Oct. 7—New York (Hadley).....	7	Cincinnati (Thompson).....	3	At Cincinnati
Oct. 8—New York (Murphy).....	7	Cincinnati (Walters).....	4	At Cincinnati (10 inn.)

1940—CINCINNATI N. L. (4) vs. DETROIT A. L. (3)

Managers—William B. McKechnie, Cincinnati; Delmar D. Baker, Detroit.

Oct. 2—Detroit (Newsom).....	7	Cincinnati (Derringer).....	2	At Cincinnati
Oct. 3—Cincinnati (Walters).....	5	Detroit (Rowe).....	3	At Cincinnati
Oct. 4—Detroit (Bridges).....	7	Cincinnati (Turner).....	4	At Detroit
Oct. 5—Cincinnati (Derringer).....	5	Detroit (Trout).....	2	At Detroit
Oct. 6—Detroit (Newsom).....	8	Cincinnati (Thompson).....	0	At Detroit
Oct. 7—Cincinnati (Walters).....	4	Detroit (Rowe).....	0	At Cincinnati
Oct. 8—Cincinnati (Derringer).....	2	Detroit (Newsom).....	1	At Cincinnati

1941—NEW YORK A. L. (4) vs. BROOKLYN N. L. (1)

Managers—Joseph V. McCarthy, New York; Leo E. Durocher, Brooklyn.

Oct. 1—New York (Ruffing).....	3	Brooklyn (Davis).....	2	At New York
Oct. 2—Brooklyn (Wyatt).....	3	New York (Chandler).....	2	At New York
Oct. 4—New York (Russo).....	2	Brooklyn (Casey).....	1	At Brooklyn
Oct. 5—New York (Murphy).....	7	Brooklyn (Casey).....	4	At Brooklyn
Oct. 6—New York (Bonham).....	3	Brooklyn (Wyatt).....	1	At Brooklyn

1942—ST. LOUIS N. L. (4) vs. NEW YORK A. L. (1)

Managers—William H. Southworth, St. Louis; Joseph V. McCarthy, New York.

30—New York (Ruffing).....	7	St. Louis (M. Cooper).....	4	At St. Louis
1—St. Louis (Beazley).....	4	New York (Bonham).....	3	At St. Louis
3—St. Louis (White).....	2	New York (Chandler).....	0	At New York
4—St. Louis (Lanier).....	9	New York (Donald).....	6	At New York
5—St. Louis (Beazley).....	4	New York (Ruffing).....	2	At New York

1943—NEW YORK A. L. (4) vs. ST. LOUIS N. L. (1)

Managers—Joseph V. McCarthy, New York; William H. Southworth, St. Louis.

5—New York (Chandler).....	4	St. Louis (Lanier).....	2	At New York
6—St. Louis (M. Cooper).....	4	New York (Bonham).....	3	At New York
7—New York (Borowy).....	6	St. Louis (Brazle).....	2	At New York
10—New York (Russo).....	2	St. Louis (Brecheen).....	1	At St. Louis
11—New York (Chandler).....	2	St. Louis (M. Cooper).....	0	At St. Louis

1944—ST. LOUIS N. L. (4) vs. ST. LOUIS A. L. (2)

Managers—William H. Southworth, Cardinals; J. Luther Sewell, Browns.

4—Browns (Galehouse).....	2	Cardinals (M. Cooper).....	1	At Sportsman's Park
5—Cardinals (Donnelly).....	3	Browns (Muncier).....	2	At Sportsman's Pk. (11 inn.)
6—Browns (Kramer).....	6	Cardinals (Wilks).....	2	At Sportsman's Park
7—Cardinals (Brecheen).....	5	Browns (Jakucki).....	1	At Sportsman's Park
8—Cardinals (M. Cooper).....	2	Browns (Galehouse).....	0	At Sportsman's Park
9—Cardinals (Lanier).....	3	Browns (Potter).....	1	At Sportsman's Park

1945—DETROIT A. L. (4) vs. CHICAGO N. L. (3)

Managers—Stephen F. O'Neill, Detroit; Charles J. Grimm, Chicago.

3—Chicago (Borowy).....	9	Detroit (Newhouser).....	0	At Detroit
4—Detroit (Trucks).....	4	Chicago (Wyse).....	1	At Detroit
5—Chicago (Passeau).....	3	Detroit (Overmire).....	0	At Detroit
6—Detroit (Trout).....	4	Chicago (Prim).....	1	At Chicago
7—Detroit (Newhouser).....	8	Chicago (Borowy).....	4	At Chicago
8—Chicago (Borowy).....	8	Detroit (Trout).....	7	At Chicago (12 inn.)
10—Detroit (Newhouser).....	9	Chicago (Borowy).....	3	At Chicago

1946—ST. LOUIS N. L. (4) vs. BOSTON A. L. (3)

Managers—Edwin H. Dyer, St. Louis; Joseph E. Cronin, Boston.

6—Boston (Johnson).....	3	St. Louis (Pollet).....	2	At St. Louis (10 innings)
7—St. Louis (Brecheen).....	3	Boston (Harris).....	0	At St. Louis
9—Boston (Ferriss).....	4	St. Louis (Dickson).....	0	At Boston
10—St. Louis (Munger).....	12	Boston (Hughson).....	3	At Boston
11—Boston (Dobson).....	6	St. Louis (Brazle).....	3	At Boston
13—St. Louis (Brecheen).....	4	Boston (Harris).....	1	At St. Louis
15—St. Louis (Brecheen).....	4	Boston (Klinger).....	3	At St. Louis

1947—NEW YORK A. L. (4) vs. BROOKLYN N. L. (3)

Managers—Stanley R. Harris, New York; Burton E. Shotton, Brooklyn.

30—New York (Shea).....	5	Brooklyn (Branca).....	3	At New York
1—New York (Reynolds).....	10	Brooklyn (Lombardi).....	3	At New York
2—Brooklyn (Casey).....	9	New York (Newsem).....	8	At Brooklyn
3—Brooklyn (Casey).....	3	New York (Bevens).....	2	At Brooklyn
4—New York (Shea).....	2	Brooklyn (Barney).....	1	At Brooklyn
5—Brooklyn (Branca).....	8	New York (Page).....	6	At New York
6—New York (Page).....	5	Brooklyn (Gregg).....	2	At New York

Players' World Series Purses

(Full shares only)

Cleveland Indians (30 shares)	\$6,772.07
ton Braves (31 shares)	4,570.73
ton Red Sox (2d place)	1,191.71
oy Cardinals (2d place)	1,341.52
York Yankees (3d place)	778.88
oklyn Dodgers (3d place)	898.72
adelphia Athletics (4th place) ..	415.32
sburgh Pirates (4th place)	391.34

Record.

Indians-Braves Set All-Time Marks

All-time attendance and receipts records for a baseball game were set in the fifth contest of the 1948 world series between the Cleveland Indians and Boston Braves at Municipal Stadium, Cleveland, on Oct. 10. The crowd of 86,288, of which 11,813 were standees, paid \$378,778.73 to see the Braves win, 11 to 5.

1948 World Series Statistics

COMPOSITE BOX SCORE

CLEVELAND AMERICANS

BOSTON NATIONALS

	BATS	G	AB	R	H	2B	3B	HR	REI	BAT. AVG.
Mitchell, lf	L	6	23	4	4	1	0	1	1	.174
Doby, cf-rr	L	6	22	1	7	1	0	1	2	.318
Tucker, cf	L	1	3	1	1	0	0	0	0	.333
Boudreau, ss	R	6	22	1	6	4	0	0	3	.273
Gordon, 2b	R	6	22	3	4	0	0	0	2	.182
Keltner, 3b	R	6	21	3	2	0	0	0	0	.095
Judnich, rf	L	4	13	1	1	0	0	0	1	.077
Peck, rf	L	1	0	0	0	0	0	0	0	.000
Clark, rf	R	1	3	0	0	0	0	0	0	.000
Kennedy, rf-lf	R	3	2	0	1	0	0	0	1	.500
Robinson, lb	L	6	20	0	6	0	0	0	1	.300
Hegan, c	R	6	19	2	4	0	0	1	5	.211
Feller, p	R	2	4	0	0	0	0	0	0	.000
Lemon, p	L	2	7	0	0	0	0	0	0	.000
Bearden, p	L	2	4	1	2	1	0	0	0	.500
Gromek, p	L	1	3	0	0	0	0	0	0	.000
Klieaman, p	R	1	0	0	0	0	0	0	0	.000
Christopher, p	R	1	0	0	0	0	0	0	0	.000
Paige, p	R	1	0	0	0	0	0	0	0	.000
Muncief, p	R	1	0	0	0	0	0	0	0	.000
Rosen, p	R	1	1	0	0	0	0	0	0	.000
Boone, p	R	1	1	0	0	0	0	0	0	.000
Tipton, p	R	1	1	0	0	0	0	0	0	.000
Totals		191	17	38	7	0	4	16		.199

	BATS	G	AB	R	H	2B	3B	HR	REI	BAT. AVG.
Holmes, rf	L	6	26	3	5	0	0	0	1	.192
Dark, ss	R	6	24	2	4	1	0	0	0	.16
Torgeson, lb	L	5	18	2	7	3	0	0	1	.36
Elliott, 3b	R	6	21	4	7	0	0	2	5	.333
Rickert, lf	L	5	19	2	4	0	0	1	2	.211
Salkeld, c	L	5	9	2	2	0	0	1	1	.222
Masi, c	R	5	8	1	1	1	0	0	1	.125
M. McCormick, cf-lf	R	6	23	1	6	0	0	0	2	.261
Conatser, cf	R	2	4	0	0	0	0	0	1	.000
Stanky, 2b	R	6	14	0	4	1	0	0	1	.286
Sisti, 2b	R	2	1	0	0	0	0	0	0	.000
Sain, p	R	2	5	0	1	0	0	0	0	.200
Spahn, p	L	3	4	0	0	0	0	0	1	.000
Bickford, p	R	1	0	0	0	0	0	0	0	.000
Barrett, p	R	2	0	0	0	0	0	0	0	.000
Potter, p	L	2	2	0	1	0	0	0	0	.500
Voiselle, p	R	2	2	0	0	0	0	0	0	.000
F. McCormick, lb	R	3	5	0	1	0	0	0	0	.200
Sanders	L	1	1	0	0	0	0	0	0	.000
Ryan	R	2	1	0	0	0	0	0	0	.000
Totals		187	17	43	6	0	4	16		.230

F. McCormick struck out for Barrett in 7th, 2d game, and grounded out for Voiselle in 7th, 6th game.

Sanders grounded out for Potter in 9th, 2d game.

Ryan struck out for Voiselle in 8th, 3d game, and ran for Stanky in 9th, 6th game.

Salkeld filed out for Masi in 9th, 4th game.

Rosen popped out for Paige in 7th, 5th game.

Boone struck out for Judnich in 8th, 5th game.

Tipton struck out for Muncief in 9th, 5th game.

Sisti popped into double play for Spahn in 9th, 6th game.

COMPOSITE SCORE BY INNINGS

CLEVELAND AMERICANS	2	0	3	7	1	2	0	1	1-17
BOSTON NATIONALS	4	0	1	1	0	1	7	3	0-17

PITCHING SUMMARY

Cleveland Americans

	THROWS	G	COMP. GAMES	IP	H	R	EARNED RUNS	BB	SO	HB	WP	W	L	PCT.	ERA.
Lemon	R	2	1	16½	16	4	3	7	6	0	0	2	0	1.000	1.65
Bearden	L	2	1	10½	6	0	0	1	4	0	0	1	0	1.000	0.00
Gromek	R	1	1	9	7	1	1	1	2	0	0	1	0	1.000	1.00
Feller	R	2	1	14½	10	3	8	5	7	0	0	0	2	.000	5.02
Klieaman	R	1	0	0	1	3	3	2	0	0	0	0	0	.000	81.00
Christopher	R	1	0	0	2	1	1	0	0	0	0	0	0	.000	27.00
Paige	R	1	0	¾	0	0	0	0	0	0	0	0	0	.000	0.00
Muncief	R	1	0	2	1	0	0	0	0	0	0	0	0	.000	0.00

Boston Nationals

	THROWS	G	COMP. GAMES	IP	H	R	EARNED RUNS	BB	SO	HB	WP	W	L	PCT.	ERA.
Sain	R	2	2	17	9	2	2	0	9	0	0	1	1	.500	1.06
Spahn	L	3	0	12	10	4	4	3	12	0	0	1	1	.500	3.00
Bickford	R	1	0	3½	4	2	1	5	1	0	0	0	1	.000	2.70
Voiselle	R	2	0	10½	8	3	3	2	2	1	0	0	1	.000	2.53
Barrett	R	2	0	3½	1	0	0	0	1	0	0	0	0	.000	0.00
Potter	R	2	0	5½	6	6	5	2	1	0	0	0	0	.000	8.44

STOLEN BASES—Hegan, Gordon, Torgeson. SACRIFICES—Feller, Salkeld, M. McCormick, Stanky, Clark, Bickford, Sain, Hegan, Dark, Voiselle. DOUBLE PLAYS—Holmes and Torgeson; Dark, Stanky and F. McCormick; Boudreau, Gordon and Robinson 2; Gordon, Boudreau and Robinson 2; Bearden, Gordon and Robinson; Keltner, Gordon and Robinson; Tucker and Robinson; Lemon, Boudreau and Robinson; Elliott, Stanky and Torgeson; Hegan and Gordon. BALKS—Paige, Lemon. LEFT ON BASES—Cleveland 34, Boston 34. UMPIRES—Barr (N), Summers (A), Stewart (N), Grieve (A), Paparella (A), Pinelli (N).

ATTENDANCES—First game, 40,135; second, 39,633; third, 70,306; fourth, 81,897; fifth, 86,288 (record); sixth, 40,103. RECEIPTS—First game, \$180,122.22; second, \$178,419.63; third, \$345,614.47; fourth, \$370,775.03; fifth, \$378,778.73 (record); sixth, \$179,975.48. TIMES OF GAMES—1:42, 2:14, 1:36, 1:31, 2:39, 2:17.

BOX SCORES

FIRST GAME

At Boston, Oct. 6

CLEVELAND (A)					
	AB	R	H	PO	A
ell, lf	4	0	0	2	0
cf	4	0	1	3	0
reau, ss	4	0	0	2	1
n, 2b	4	0	1	1	1
er, 3b	4	0	1	1	1
ch, rf	4	0	0	2	0
son, lb	3	0	1	10	1
n, c	3	0	1	2	1
p	2	0	0	1	4
al	32	0	4	24	9
and	0 0 0	0 0 0	0 0 0	0 0 0	0—0
	0 0 0	0 0 0	0 1 1	x—1	

Errors—Elliott 2.
Batted in—Holmes.

Base hits—Hegan, Gordon, Torgeson. Sacrifices—Salkeld, M. McCormick. Left on bases—Cleveland 4. Bases on balls—Off Feller 3 (Torgeson, Salkeld, Stanky).

BOSTON (N)					
	AB	R	H	PO	A
Holmes, rf	4	0	1	5	0
Dark, ss	4	0	0	1	1
Torgeson, lb	2	0	0	4	0
Elliott, 3b	3	0	0	1	0
Rickert, lf	3	0	1	5	0
Salkeld, c	1	0	0	5	1
Masi, c	0	1	0	1	0
M. McCormick, cf	2	0	0	5	0
Stanky, 2b	2	0	0	0	1
Sisti, 2b	0	0	0	0	0
Sain, p	3	0	0	0	0
Total	24	1	2	27	3

Salkeld, Stanky). Struck out—By Feller 2 (Torgeson, Salkeld); Sain 6 (Gordon, Feller 2, Boudreau, Keltner, Judnich).

Umpires—Barr (N), plate; Summers (A), lb; Stewart (N), 2b; Grieve (A), 3b; Paparella (A), lf; Pinelli (N), rf. Time—1:42. Attendance—40,135.

SECOND GAME

At Boston, Oct. 7

CLEVELAND (A)					
	AB	R	H	PO	A
ell, lf	5	1	1	1	0
rf	3	0	0	2	0
edy, rf	1	0	1	0	0
reau, ss	5	1	2	4	2
n, 2b	4	1	1	2	3
er, 3b	4	0	0	0	0
cf	4	0	2	0	0
son, lb	3	0	1	8	3
n, c	3	1	0	7	0
t, p	4	0	0	3	6
al	36	4	8	27	14

BOSTON (N)

	AB	R	H	PO	A
ss, rf	4	0	0	2	1
ss	4	1	1	0	2
son, lb	4	0	2	14	1
t, 3b	4	0	1	1	5
t, lf	4	0	0	5	0
d, c	1	0	1	2	0
c	1	0	2	1	0
c McCormick, cf	4	0	2	1	0
y, 2b	2	0	1	1	3
p	2	0	0	0	1
t, p	0	0	0	0	0
McCormick	1	0	0	0	0
p	1	0	0	0	0
rs	1	0	0	0	0
l	32	1	8	27	13

Struck out for Barrett in seventh.
Batted out for Potter in ninth.

and	0 0 0	2 1 0	0 0 1	4—4
	1 0 0	0 0 0	0 0 1	0—1

Errors—Gordon, Dark 2, Elliott.

Batted in—Elliott, Gordon, Doby, Boudreau, Ken-

base hits—Doby, Boudreau, Stanky. Sacrifices—Clark. Double plays—Holmes and Torgeson; Boudreau and Robinson; Gordon, Boudreau and Robinson. Left on bases—Cleveland 8; Boston 8. Earned runs—Cleveland 3, Boston 0. Bases on balls—Off Spahn 2 (son, Hegan); Lemon 3 (Stanky, Salkeld 2). Struck by Spahn 1 (Clark); Lemon 5 (Rickert, Elliott, F. McCormick, M. McCormick); Barrett 1 (Doby); 1 (Doby).

Pitching summary—Off Spahn 6 hits, 3 runs in 4 and 2/3 innings; Barrett 1 hit, 0 runs in 2 and 2/3; Potter 1 run in 2. Losing pitcher—Spahn.

Umpires—Summers (A), plate; Stewart (N), lb; Grieve (N), 2b; Summers (A), 3b; Paparella (A), lf; Pinelli (N), rf. Time—2:14. Attendance—39,633.

THIRD GAME

At Cleveland, Oct. 8

BOSTON (N)					
	AB	R	H	PO	A
Holmes, rf	4	0	0	2	0
Dark, ss	4	0	1	3	2
M. McCormick, lf	4	0	1	6	0
Elliott, 3b	3	0	1	2	1
F. McCormick, lb	3	0	1	5	1
Conatser, cf	3	0	0	1	0
Masi, c	3	0	0	2	0
Stanky, 2b	3	0	1	2	3
Bickford, p	0	0	0	0	0
Voiselle, p	1	0	0	1	0
aRyan	1	0	0	0	0
Barrett, p	0	0	0	0	0
Total	29	0	5	24	7

CLEVELAND (A)

	AB	R	H	PO	A
Mitchell, lf	3	0	0	2	0
Doby, cf	3	0	1	1	0
Boudreau, ss	3	0	0	1	2
Gordon, 2b	4	0	0	3	4
Keltner, 3b	3	1	0	0	4
Judnich, rf	3	0	0	1	0
Robinson, lb	3	0	1	14	0
Hegan, c	3	0	1	5	0
Bearden, p	3	1	2	0	6
Total	28	2	5	27	16

aStruck out for Voiselle in eighth.

Boston	0 0 0	0 0 0	0 0 0	0—0
Cleveland	0 0 1	1 0 0	0 0 x	2—2

Error—Dark.

Run batted in—Hegan.

Two-base hits—Bearden, Dark. Sacrifice—Bickford. Double plays—Dark, Stanky and F. McCormick; Bearden, Gordon and Robinson; Keltner, Gordon and Robinson. Left on bases—Boston 3, Cleveland 7. Earned runs—Cleveland 1. Bases on balls—Off Bickford 5 (Doby, Judnich, Mitchell, Boudreau, Keltner). Struck out—By Bearden 4 (Dark, M. McCormick, F. McCormick, Ryan); Bickford 1 (Judnich).

Pitching summary—Off Bickford 4 hits, 2 runs in 3 1/3 innings; Voiselle 1 hit 0 runs in 3 2/3; Barrett 0 hits 0 runs in 1. Losing pitcher—Bickford.

Umpires—Stewart (N), plate; Grieve (A), lb; Barr (N), 2b; Summers (A), 3b; Paparella (A), lf; Pinelli (N), rf. Time—1:36. Attendance—70,306.

FOURTH GAME

At Cleveland, Oct. 9

BOSTON (N)					
	AB	R	H	PO	A
Holmes, rf	4	0	0	0	1
Dark, ss	4	0	0	2	5
Torgeson, lb	3	0	2	11	2
Elliott, 3b	4	0	0	2	2
Rickert, lf	4	1	2	2	0
M. McCormick, cf	4	0	1	1	0
Masi, c	3	0	0	3	1
aSalkeld	1	0	0	0	0
Stanky, 2b	3	0	1	1	1
Sain, p	2	0	1	2	2
Total	32	1	7	24	14

aFlied out for Masi in ninth.

Boston	0	0	0	0	1	0	—1
Cleveland	1	0	1	0	0	0	X—2

Errors—None.

Runs batted in—Boudreau, Doby, Rickert.

Two-base hits—Torgeson 2, Boudreau. Home runs—Doby, Rickert. Sacrifices—Sain, Hegan. Double play—

CLEVELAND (A)					
	AB	R	H	PO	A
Mitchell, lf	4	1	1	2	0
Doby, cf	3	1	1	2	0
Boudreau, ss	3	0	1	2	4
Gordon, 2b	3	0	0	4	1
Keltner, 3b	3	0	0	1	2
Judnich, rf	3	0	0	1	1
Kennedy, cf	0	0	0	1	1
Robinson, lb	3	0	2	8	1
Hegan, c	2	0	0	5	1
Gromek, p	3	0	0	1	1
Total	27	2	5	27	10

Boudreau, Gordon and Robinson. Earned runs—Boston 1, Cleveland 2. Left on bases—Boston 6, Cleveland 2. Bases on balls—Off Gromek 1 (Torgeson). Struck out—By Sain 3 (Gromek, Judnich 2); Gromek 2 (Rickert, M. McCormick).

Umpires—Grieve (A), plate; Barr (N), lb; Summers (A), 2b; Stewart (N), 3b; Pinelli (N), lf; Paparella (A), rf. Time—1:31. Attendance—81,897.

FIFTH GAME

At Cleveland, Oct. 10

BOSTON (N)					
	AB	R	H	PO	A
Holmes, rf	5	2	2	0	0
Dark, ss	4	1	1	1	1
Torgeson, lb	5	1	2	10	1
Elliott, 3b	4	3	2	1	3
Rickert, lf	5	1	1	3	0
Salkeld, c	4	2	1	8	0
M. McCormick, cf	5	1	1	2	0
Stanky, 2b	3	0	1	1	2
Potter, p	2	0	1	1	0
Spahn, p	2	0	0	0	1
Total	39	11	12	27	8

CLEVELAND (A)

	AB	R	H	PO	A
Mitchell, lf	3	1	1	3	0
Doby, cf	4	0	0	4	0
Boudreau, ss	4	0	2	0	3
Gordon, 2b	3	1	1	2	1
Keltner, 3b	3	1	0	1	1
Judnich, rf	3	1	1	3	0
bBoone	1	0	0	0	0
Peck, rf	0	0	0	0	0
Robinson, lb	4	0	0	8	2
Hegan, c	4	1	1	4	1
Feller, p	2	0	0	1	0
Klieman, p	0	0	0	0	0
Christopher, p	0	0	0	0	0
Paige, p	0	0	0	0	0
aRosen	1	0	0	0	0
Muncrief, p	0	0	0	1	0
cTipton	1	0	0	0	0
Total	33	5	6	27	8

aPopped out for Paige in seventh.

bStruck out for Judnich in eighth.

cStruck out for Muncrief in ninth.

Boston	3	0	1	0	1	6	0	—11
Cleveland	1	0	4	0	0	0	0	—5

Errors—Doby, Keltner.

Runs batted in—Elliott 4, Mitchell, Judnich, Hegan 3, Salkeld, Torgeson, Rickert, M. McCormick, Stanky, Spahn.

Two-base hits—Boudreau. Home runs—Elliott 2, Mitchell, Hegan, Salkeld. Sacrifice—Dark. Earned runs—Boston 11, Cleveland 5. Left on bases—Boston 6, Cleveland 4. Bases on balls—Off Potter 2 (Gordon, Keltner); Spahn 1 (Mitchell); Feller 2 (Stanky 2); Klieman 2 (Elliott, Salkeld). Struck out—By Feller 5 (Rickert 2, Potter, Elliott, Spahn); Spahn 7 (Doby, Hegan 2, Gordon, Boone, Tipton, Keltner).

Pitching summary—Off Potter 5 hits 5 runs in 3 1/3 innings; Spahn 1 hit 0 runs in 5 2/3; Feller 3 hits 7 runs in 6 1/3; Klieman 1 hit 3 runs in 0 (pitched to three batters); Christopher 2 hits 1 run in 0 (pitched to two batters); Paige 0 hits 0 runs in 2/3; Muncrief 1 hit 0 runs in 2. Balk—Paige. Winning pitcher—Spahn. Losing pitcher—Feller.

Umpires—Barr (N), plate; Summers (A), lb; Stewart (N), 2b; Grieve (A), 3b; Paparella (A), lf; Pinelli (N), rf. Time—2:39. Attendance—86,288.

SIXTH GAME

At Boston, Oct. 11

CLEVELAND (A)					
	AB	R	H	PO	A
Mitchell, lf	4	1	1	3	0
Kennedy, lf	4	0	0	1	0
Doby, rf	4	0	2	1	0
Boudreau, ss	3	0	1	2	2
Gordon, 2b	4	1	1	3	3
Keltner, 3b	4	1	1	0	3
Tucker, cf	3	1	1	3	1
Robinson, lb	4	0	2	12	0
Hegan, c	4	0	1	2	2
Lemon, p	3	0	0	0	3
Bearden, p	1	0	0	0	1
Total	35	4	10	27	15

BOSTON (N)

	AB	R	H	PO	A
Holmes, rf	5	1	2	1	0
Dark, ss	4	0	1	0	1
Torgeson, lb	4	1	1	5	1
Elliott, 3b	3	1	3	4	3
Rickert, lf	3	0	0	5	4
Conatser, cf	1	0	0	0	0
Salkeld, c	2	0	0	4	1
Masi, c	1	0	1	3	0
M. McCormick, cf-lf	4	0	1	2	0
Stanky, 2b	1	0	0	3	2
bRyan	0	0	0	0	0
Voiselle, p	1	0	0	0	0
aF. McCormick	1	0	0	0	0
Spahn, p	0	0	0	0	1
cSisti	1	0	0	0	1
Total	31	3	9	27	9

aGrounded out for Voiselle in seventh.

bRan for Stanky in ninth.

cHit into double play for Spahn in ninth.

Cleveland	0	1	0	2	0	1	0	—4
Boston	0	0	1	0	0	2	0	—3

Errors—None.

Runs batted in—Boudreau, M. McCormick, Gordon, Hegan, Robinson, Conatser, Masi.

Two-base hits—Mitchell, Boudreau, Torgeson, Masi. Home run—Gordon. Sacrifice—Voiselle. Double plays—Tucker and Robinson; Lemon, Boudreau and Robinson; Gordon, Boudreau and Robinson; Elliott, Stanky and Torgeson; Hegan and Gordon. Earned runs—Cleveland 4, Boston 3. Left on bases—Cleveland 7, Boston 7. Bases on balls—Off Lemon 4 (Stanky 2, Salkeld, Elliott); Voiselle 2 (Doby, Tucker); Bearden 1 (Stanky). Struck out—By Voiselle 2 (Keltner, Hegan); Lemon 1 (M. McCormick); Spahn 4 (Hegan, Bearden, Kennedy, Doby).

Pitching summary—Off Voiselle 7 hits, 3 runs in 7 1/3 innings; Spahn 3 hits, 1 run in 2; Lemon 8 hits, 3 runs in 7 1/3; Bearden 1 hit 0 runs in 1 2/3. Hit by pitcher—By Voiselle (Boudreau). Balk—Lemon. Winning pitcher—Lemon. Losing pitcher—Voiselle.

Umpires—Summers (A), plate; Stewart (N), lb; Grieve (A), 2b; Barr (N), 3b; Pinelli (N), lf; Paparella (A), rf. Time—2:17. Attendance—40,103.

MAJOR LEAGUE STATISTICS

Source: American League and National League Service Bureaus.

Left-field foul line; cf—center field; rf—right-field foul line. (2)—Indicates double-header scheduled.

American League

Club, nickname and grounds	Distance, feet lf cf rf	Seating capacity	Record attendance	Visiting club	Date
Boston Red Sox—Fenway Park	351 425 310	34,239	41,766	New York (2)	Aug. 12, 1934
Chicago White Sox—Comiskey Park	352 440 352	47,400	52,494	New York (2)	June 18, 1933
Cleveland Indians—Municipal Stadium	362 410 362	80,000	82,781	Philadelphia (2)	June 20, 1948
Detroit Tigers—Briggs Stadium	340 440 325	52,954	58,369	New York (2)	July 20, 1947
New York Yankees—Yankee Stadium	301 461 296	65,000	81,841	Boston (2)	May 30, 1938
Philadelphia Athletics—Shibe Park	334 468 331	33,000	38,800	Washington (2)	July 13, 1931
St. Louis Browns—Sportsman's Park	351 425 310	34,000	34,625	New York	Oct. 1, 1944
Washington Senators—Griffith Stadium	402 426 328	32,000	35,563	New York (2)	July 4, 1936

National League

Boston Braves—Braves Field	337 390 319	41,000	47,123	Philadelphia (2)	May 22, 1932
Bryn Mawr Dodgers—Ebbets Field	343 415 297	35,000	41,209	New York (2)	May 30, 1934
Chicago Cubs—Wrigley Field	355 400 353	38,440	46,965	Pittsburgh (2)	May 31, 1948
Cincinnati Reds—Crosley Field	328 387 342	30,000	36,961	Pittsburgh (2)	Apr. 27, 1947
New York Giants—Polo Grounds	279 484 257.67	55,000	60,747	Brooklyn (2)	May 31, 1937
Philadelphia Phillies—Shibe Park	334 468 331	33,000	40,942	Brooklyn (2)	May 11, 1947
Pittsburgh Pirates—Forbes Field	335 457 300	35,545	43,586	New York (2)	Aug. 31, 1938
St. Louis Cardinals—Sportsman's Park	351 425 310	34,000	45,770	Chicago (2)	July 12, 1931

CHART OF 1948 MAJOR LEAGUE PENNANT RACES

MONDAY MORNING STANDINGS

AMERICAN LEAGUE	APR. 26	MAY					JUNE				JULY				AUGUST					SEPTEMBER				OCTOBER
		3	10	17	24	31	7	14	21	28	5	12	19	26	2	9	16	23	30	6	13	20	27	4
Cleveland	1	1	2	1	2	1	1	1	1	1	1	1	1	3	2	1	1	1	3	3	3	2	1	1
Boston	7	6	6	4	7	7	4	6	4	4	4	4	4	4	4	4	3	2	1	2	1	1	2	1
New York	4	4	3	3	3	3	3	3	2	3	3	3	3	4	3	3	4	3	2	2	2	3	2	3
Philadelphia	3	2	1	1	2	1	2	2	3	2	2	2	2	2	1	2	2	4	4	4	4	4	4	4
Pittsburgh	4	5	7	5	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
St. Louis	4	3	5	6	5	5	7	7	7	7	7	7	7	7	7	7	7	6	6	6	6	6	6	6
Washington	2	7	4	7	6	6	4	5	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7
Chicago	7	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8

NATIONAL LEAGUE	APR. 26	MAY					JUNE				JULY				AUGUST					SEPTEMBER				OCTOBER
		3	10	17	24	31	7	14	21	28	5	12	19	26	2	9	16	23	30	6	13	20	27	4
Boston	8	5	6	3	3	4	4	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1
St. Louis	3	4	1	1	1	1	1	4	3	2	3	3	3	3	4	2	3	3	3	3	3	2	3	3
Bryn Mawr	3	3	4	6	8	6	6	6	6	6	5	2	2	2	3	3	2	2	1	2	4	2	2	2
Pittsburgh	3	1	3	4	3	3	3	2	3	2	2	4	4	4	5	5	4	4	4	4	2	4	4	4
New York	1	2	2	2	2	2	2	1	4	4	4	5	5	5	2	4	5	5	5	5	5	5	5	5
Philadelphia	2	5	5	4	5	4	5	5	5	5	4	7	6	6	6	6	6	6	6	6	6	6	6	6
Cincinnati	3	5	8	7	7	7	7	7	7	7	7	6	7	7	7	7	7	7	7	8	8	7	7	7
Chicago	3	8	7	7	6	8	8	8	8	8	8	8	8	8	8	8	8	8	8	7	7	8	8	8

World Series Club Standing

	Series	Won	Lost	Pct.
Cleveland (A)	2	2	0	1.000
Boston (A)	6	5	1	.833
New York (A)	15	11	4	.733
St. Louis (N)	9	6	3	.667
Cincinnati (N)	3	2	1	.667
Chicago (A)	3	2	1	.667
Philadelphia (A)	8	5	3	.625
Bryn Mawr (N)	2	1	1	.500
Pittsburgh (N)	4	2	2	.500
New York (N)	12	4	8	.333
Washington (A)	3	1	2	.333
Pitt (A)	7	2	5	.286
Chicago (N)	10	2	8	.200
Philadelphia (N)	1	0	1	.000
St. Louis (A)	1	0	1	.000
Bryn Mawr (N)	4	0	4	.000

RECAPITULATION

	Won
American League	28
National League	17

OTHER 1948 SERIES STATISTICS

FINAL STANDING OF THE CLUBS

	Won	Lost	Pct.
Cleveland Indians	4	2	.667
Boston Braves	2	4	.333

Six-Game Totals

Paid attendance—358,362.

Net receipts—\$1,633,685.56.

Commissioner's share—\$245,052.82.

*Players' share—\$548,213.99.

Clubs' and leagues' share—\$840,418.75.

*Players share only in receipts of first four games.

Indians-Dodgers Set Exhibition Record

A night game between the Indians and the Brooklyn Dodgers at Cleveland on July 14, 1948, drew 64,897 fans, an all-time record for an exhibition contest.

MAJOR LEAGUE RECORDS FOR 1948

American League

FINAL STANDING OF CLUBS

	Cleveland	Boston	New York	Philadelphia	Detroit	St. Louis	Washington	Chicago	Wn.	Lost	Percentage	Games Behind
*Cleveland.....	12	10	16	13	14	16	16	97	58	.626		
Boston.....	11	14	12	15	15	15	14	96	59	.619	1	
New York.....	12	8	12	13	16	17	16	94	60	.610	2½	
Philadelphia.....	6	10	10	10	18	14	16	84	70	.545	12½	
Detroit.....	9	7	9	12	11	16	14	78	76	.506	18½	
St. Louis.....	8	7	6	4	11	10	13	59	94	.386	37	
Washington.....	6	7	5	8	6	12	12	56	97	.366	40	
Chicago.....	6	8	6	6	8	8	9	51	101	.336	44½	
Lost.....	58	59	60	70	76	94	97	101				

*Beat Boston, 8 to 3, in title play-off on Oct. 4.

National League

FINAL STANDING OF CLUBS

	Boston	St. Louis	Brooklyn	Pittsburgh	New York	Philadelphia	Cincinnati	Wn.	Lost	Percentage	Games Behind
*Boston.....	11	14	12	11	14	13	16	91	62	.595	
St. Louis.....	11	10	9	15	17	12	11	85	69	.552	6½
Brooklyn.....	8	12	9	11	15	18	11	84	70	.545	7½
Pittsburgh.....	10	13	13	10	10	13	14	83	71	.539	8½
New York.....	11	7	11	12	14	12	11	78	76	.506	13½
Philadelphia.....	8	5	7	12	8	11	15	66	88	.429	25½
Cincinnati.....	8	10	4	9	10	11	12	64	89	.418	27
Chicago.....	6	11	11	11	8	7	10	64	90	.416	27½
Lost.....	62	69	70	71	76	88	89	90			

*Clinched title on Sept. 26.

THE LEADERS

American League

BATTING—Ted Williams, Boston.....	369
RUNS BATTED IN—Joe DiMaggio, New York.....	156
RUNS—Tommy Henrich, New York.....	138
HITS—Bob Dillinger, St. Louis.....	207
DOUBLES—Ted Williams, Boston.....	44
TRIPLES—Tommy Henrich, New York.....	14
HOME RUNS—Joe DiMaggio, New York.....	39
STOLEN BASES—Bob Dillinger, St. Louis.....	27
STRIKEOUTS—Bob Feller, Cleveland.....	164
PITCHING—Jack Kramer, Boston (W 18, L 5).....	783

National League

BATTING—Stan Musial, St. Louis.....	376
RUNS BATTED IN—Stan Musial, St. Louis.....	131
RUNS—Stan Musial, St. Louis.....	135
HITS—Stan Musial, St. Louis.....	230
DOUBLES—Stan Musial, St. Louis.....	45
TRIPLES—Stan Musial, St. Louis.....	18
HOME RUNS—Johnny Mize, New York } Ralph Kiner, Pittsburgh }	40
STOLEN BASES—Richie Ashburn, Philadelphia.....	32
STRIKEOUTS—Harry Brecheen, St. Louis.....	148
PITCHING—Truett Sewell, Pittsburgh (W 13, L 3).....	813

Unofficial Averages

INDIVIDUAL BATTING

	g.	ab.	r.	h.	hr.	rbi.	avg.
Williams, Boston ..	137	509	124	188	25	128	.369
Boudreau, Cleve. .	152	560	116	199	18	107	.355
Mitchell, Cleve. .	141	608	84	204	4	54	.336
Zarilla, St. Louis ..	144	529	77	174	12	75	.329
McCosky, Phila. .	135	514	95	168	0	46	.321
Dillinger, St. Louis	153	644	110	207	2	44	.321
DiMaggio, N. Y. .	153	594	111	190	39	156	.320
Majeski, Phila. .	149	587	88	185	11	120	.315
Appling, Chicago ..	138	497	63	156	0	46	.314
Evers, Detroit.....	139	538	80	168	10	101	.312
Goodman, Boston ..	127	445	65	139	1	66	.312
Lindell, N. Y. .	88	312	58	97	13	55	.311
Clark, Cleveland ..	81	271	42	84	9	37	.310
Henrich, N. Y. .	144	588	138	181	25	100	.308
Kell, Detroit.....	92	367	47	113	2	44	.308
Berra, N. Y. .	125	469	70	143	14	98	.305
Valo, Phila. .	113	384	72	117	3	46	.305
Doby, Cleve. .	121	438	80	132	14	64	.301
Brown, N. Y. .	113	363	62	109	3	48	.300
Kokos, St. Louis ..	71	257	41	77	4	39	.300
Kelfner, Cleve. .	153	558	92	166	31	116	.298
Johnson, N. Y. .	127	446	59	132	12	63	.296
Friday, St. Louis ..	151	560	95	165	8	79	.295
Lipon, Detroit.....	121	457	64	134	5	52	.293
Mullin, Detroit.....	138	496	91	143	23	80	.288
Outlaw, Detroit.....	74	198	30	57	0	24	.288
DiMaggio, Boston ..	155	648	127	185	9	85	.285
Doerr, Boston.....	140	526	95	150	27	113	.285
Pesky, Boston.....	143	565	125	160	3	55	.283
Philley, Chicago ..	137	488	53	138	5	42	.283
Gordon, Cleve. .	144	551	95	154	32	124	.279
Wright, Chicago ..	135	457	52	127	4	61	.278
Tebbetts, Boston ..	128	446	54	124	5	68	.278
Stewart, N. Y. .	123	406	57	113	7	68	.278
6 N. Y.—117 Wash. .	145	520	82	144	7	86	.277
Fain, Phila. .	103	333	22	92	2	46	.276
Lehner, St. Louis ..	110	322	49	89	11	52	.276
Wakenfield, Detroit	119	417	60	114	6	37	.273
Kolloway, Chicago ..	95	185	14	50	0	19	.270
Kennedy, 30 Chi.—65 Cleve.							

INDIVIDUAL BATTING

	g.	ab.	r.	h.	hr.	rbi.	avg.
Musial, St. Louis ..	155	611	135	230	39	131	.376
Ashburn, Phila. .	117	463	78	154	2	40	.333
Rackley, Brooklyn	88	282	55	92	0	15	.328
Holmes, Boston ..	139	585	84	190	6	80	.325
Dark, Boston.....	137	543	85	175	3	48	.322
Slaughter, St. Louis	146	548	92	176	11	90	.321
Northey, St. Louis	95	246	39	79	13	65	.321
Heath, Boston.....	115	364	64	116	20	77	.319
Walker, Pittsburgh	129	408	39	129	2	52	.318
Stanky, Boston.....	67	248	50	78	2	28	.318
Pafko, Chicago.....	142	547	82	172	26	100	.318
Gordon, New York ..	142	521	101	157	30	107	.307
Baumholtz, Cinc. .	129	418	59	126	4	30	.307
M. McCormick, Bos.	115	345	47	103	1	37	.302
Furillo, Brooklyn	108	364	55	108	4	45	.299
Robinson, Brooklyn	147	574	108	170	12	84	.299
Waitkus, Chicago ..	138	562	87	166	7	43	.299
Scheffing, Chicago	102	294	23	87	5	45	.299
Adams, Cincinnati	87	262	33	77	1	21	.299
Mize, New York.....	152	558	109	163	40	125	.295
Witman, Brooklyn	60	165	24	48	0	20	.292
Ennis, Phila. .	152	589	86	171	30	96	.292
Murtaugh, Pitts. .	144	513	56	149	1	71	.293
Hermanski, Bklyn.	133	400	63	116	15	59	.293
Rolek, Pittsburgh ..	156	640	87	185	4	51	.288
Lorey, Chicago.....	129	436	47	126	2	53	.288
Lockman, N. Y. .	146	584	117	167	18	59	.288
Walker, Phila. .	112	332	35	95	2	23	.288
Galan, Cinc. .	54	77	19	22	2	16	.288
Westlake, Pitts. .	132	428	80	122	17	64	.288
R. Elliott, Boston ..	151	540	98	153	23	100	.288
Walker, Chicago ..	79	170	16	48	5	24	.288
Haas, Phila. .	95	334	34	94	4	32	.288
Jeffcoat, Chicago ..	134	472	52	132	4	42	.288
Cavarretta, Chi. .	111	334	41	93	3	39	.277
Conatser, Boston ..	90	223	30	62	3	23	.277
Litwhiler, 13 Bos.—106 Cinc.	119	369	51	102	15	50	.277
Schoendienst, St. L.	119	407	64	112	4	36	.277
Hopp, Pittsburgh ..	120	393	64	108	1	29	.277
Kluszewski, Cinc. .	113	378	50	104	12	54	.277

American League—(cont.)

Individual Batting—(cont.)

	g.	ab.	r.	h.	hr.	rbi.	avg.
St. Louis	123	454	57	122	7	82	.269
St. Louis	99	268	27	72	0	22	.269
Boston	155	635	115	171	29	137	.268
N. Y.	83	228	40	61	0	18	.268
Detroit	144	521	61	139	7	56	.267
N. Y.	83	247	41	66	6	45	.267
Chicago	114	331	28	88	1	34	.266
Detroit	86	256	45	68	0	15	.266
Boston	78	188	26	49	2	29	.261
Philadelphia	123	443	58	115	14	70	.260
St. Louis	83	289	33	75	1	26	.260
Cleveland	83	242	52	63	1	20	.260
Wash.	120	409	38	106	1	40	.259
Wash.	93	229	19	59	2	25	.258
Cleveland	79	218	35	56	2	29	.257
Wash.	92	206	22	53	1	28	.257
N. Y.	128	463	65	118	6	50	.255
Philadelphia	90	302	30	77	4	41	.255
St. Louis	107	335	35	85	14	46	.254
Wash.	149	574	61	145	1	58	.253
N. Y.	141	515	90	130	3	32	.252
Cleveland	133	488	53	123	16	83	.252
Detroit	118	386	49	97	7	68	.251

National League—(cont.)

Individual Batting—(cont.)

	g.	ab.	r.	h.	bb.	so.	w.	l.	pot.
Edwards, Bklyn.	96	287	36	79	8	55			.275
Reese, Bklyn.	151	585	96	155	9	75			.274
Wrostock, Cinc.	136	512	73	140	17	76			.273
Fitz Gerald, Pitts.	101	264	32	72	1	33			.273
Marshall, N. Y.	143	537	72	146	14	87			.272
Sisler, Phila.	121	446	61	121	11	56			.271
Verban									
55 Phila.-56 Chi.	111	418	50	113	1	27			.270
Gustine, Pitts.	131	448	78	120	9	41			.268
Lang, St. Louis	117	322	30	86	4	31			.267
Cooper, N. Y.	91	288	40	77	16	54			.267
Shuba, Bklyn.	63	161	22	43	4	31			.267
Kiner, Pitts.	156	555	104	147	40	123			.265
Rigney, N. Y.	113	424	71	112	10	43			.264
Russell, Boston	89	322	44	85	9	54			.264
Corbett, Cincinnati	87	258	24	68	0	18			.264
Nicholson, Chi.	143	495	70	129	19	66			.261
Hamner, Phila.	129	446	42	115	3	53			.260
Schenz, Chi.	95	335	43	87	1	53			.260
Sauer, Cincinnati	145	532	79	138	35	97			.259
Blatnik, Phila.	121	415	56	107	6	45			.258
Campanella, Bklyn.	83	279	32	72	9	45			.258
Stevens, Pitts.	127	425	47	109	10	71			.256

PITCHING RECORDS

	g.	ip.	h.	bb.	so.	w.	l.	pot.
Cleveland	21	73	61	22	43	6	1	.857
Philadelphia	33	75	98	33	25	5	1	.833
Boston	29	205	231	66	70	18	5	.783
Detroit	26	85	73	72	59	6	2	.750
Cleveland	38	130	110	51	44	9	3	.750
Chicago	37	230	187	106	79	20	7	.741
Boston	35	91	98	43	47	10	4	.714
Philadelphia	45	94	92	35	31	5	2	.714
New York	22	62	59	30	25	5	2	.714
New York	36	223	208	74	124	19	8	.704
St. Louis	31	115	127	61	30	7	3	.700
N. Y.	89	236	240	111	99	16	7	.696
Boston	35	212	205	88	76	15	8	.652
Cincinnati	31	185	168	72	75	15	8	.652
Philadelphia	29	205	211	77	49	15	8	.652
Detroit	39	272	249	99	143	21	12	.636
Philadelphia	33	200	216	76	43	14	8	.636
Philadelphia	16	78	75	34	30	5	3	.625
N. Y.	20	77	77	29	24	5	3	.625
Boston	38	245	237	91	114	16	10	.615
N. Y.	31	133	79	101	92	8	5	.615
N. Y.	33	227	246	65	82	17	11	.607
Cleveland	45	59	55	28	13	3	2	.600
Cleveland	43	295	231	128	147	20	14	.588
Boston	28	178	183	63	53	10	7	.588
Philadelphia	39	194	198	94	127	14	10	.583
Cleveland	44	283	255	116	164	19	15	.559
Detroit	21	72	75	30	21	5	4	.556
Detroit	33	231	222	48	90	13	11	.542
Cleveland	34	163	169	45	30	11	10	.524
Detroit	43	212	199	85	124	14	13	.519
Philadelphia	33	216	225	90	88	14	13	.519
St. Louis	32	144	148	117	89	8	8	.500
Boston	27	137	152	46	36	8	8	.500
St. Louis	39	75	79	69	20	5	5	.500
Philadelphia	10	28	28	9	17	3	3	.500
Chicago	27	150	163	52	41	9	10	.474
N. Y.	28	158	117	87	72	9	10	.474
N. Y.	55	108	116	66	75	7	8	.467
St. Louis	47	94	129	71	44	6	7	.462
Chicago	40	107	102	57	38	4	5	.444
Detroit	37	66	89	31	11	3	4	.429
Chicago	27	156	169	73	52	8	11	.421
St. Louis	33	215	198	103	101	10	14	.417
Detroit	32	184	193	72	90	10	14	.417

PITCHING RECORDS

	g.	ip.	h.	bb.	so.	w.	l.	pot.
Shoun, Boston	36	75	77	20	26	5	1	.833
Sewell, Pittsburgh	21	122	126	36	37	13	3	.813
Hogue, Boston	40	87	86	20	42	8	2	.800
Dobner, Chicago	54	87	67	41	46	7	2	.778
Brecheen, St. Louis	33	233	192	49	148	20	7	.741
Potter, Boston	18	85	76	11	47	5	2	.714
Chesnes, Pittsburgh	25	194	178	88	64	14	6	.700
Bickford, Boston	33	146	125	63	58	11	5	.688
Jones, New York	55	200	202	90	84	16	8	.667
Erskine, Brooklyn	17	64	51	35	29	6	3	.667
Pollet, St. Louis	36	185	214	63	81	13	7	.650
Brazle, St. Louis	42	156	173	50	56	10	6	.625
Hansen, New York	36	98	96	36	28	5	3	.625
Sain, Boston	42	214	298	83	137	24	15	.615
Brace, Brooklyn	36	216	189	82	120	14	9	.609
Jansen, New York	42	277	283	54	126	18	12	.600
Roe, Brooklyn	34	177	157	35	82	8	8	.600
Heusser, Philadelphia	33	74	90	29	22	3	2	.600
Schmitz, Chicago	34	240	186	97	102	18	13	.581
Wehmeier, Cincinnati	33	147	179	75	55	11	8	.579
Hearn, St. Louis	34	90	92	34	25	8	6	.571
Minner, Brooklyn	28	63	62	26	22	4	3	.571
Hatten, Brooklyn	42	210	227	94	68	13	10	.565
Spahn, Boston	36	257	238	78	111	15	12	.556
Gumbert, Cincinnati	61	106	127	35	27	10	8	.556
Behrman, Brooklyn	34	92	96	42	40	5	4	.556
Vander Meer, Cincinnati	33	232	198	124	117	17	14	.548
Riddle, Pittsburgh	28	191	187	82	67	12	10	.545
Barney, Brooklyn	46	247	189	121	138	15	13	.536
Higbe, Pittsburgh	56	158	140	86	86	8	7	.532
Lombardi, Pittsburgh	38	162	156	68	51	10	9	.526
Post, New York	39	158	162	68	56	11	10	.524
Voiselle, Boston	37	215	225	92	87	13	13	.500
Rowe, Philadelphia	29	148	167	32	46	10	10	.500
Meyer, Chicago	29	165	156	77	89	10	10	.500
Hartung, New York	36	154	143	74	41	8	8	.500
Palica, Brooklyn	41	125	113	58	75	6	6	.500
Wilks, St. Louis	57	128	111	39	69	6	6	.500
Ramsdell, Brooklyn	27	50	48	40	32	4	4	.500
Staley, St. Louis	31	52	61	19	24	4	4	.500
Queen, Pittsburgh	25	66	82	41	35	4	4	.500
Nahem, Philadelphia	28	59	69	46	30	3	3	.500
Raffensberger, Cincinnati	40	180	185	38	57	11	12	.478
Munger, St. Louis	39	166	179	75	69	10	11	.476
Barrett, Boston	34	128	132	26	32	7	8	.467
Lade, Chicago	19	87	99	31	29	5	6	.455
Dubiel, Philadelphia	35	147	137	58	36	8	10	.444
Koslo, New York	35	149	166	58	59	8	10	.444
Trinkle, New York	53	72	67	40	21	4	5	.444
Roberts, Philadelphia	20	148	148	58	77	7	9	.438
Blackwell, Cincinnati	22	133	134	52	114	7	9	.438

CLUB BATTING

	g.	r.	h.	hr.	rbi.	sb.	avg.	out
and	156	870	1543	155	788	52	.283	7
York	154	847	1469	139	795	24	.280	3
St. Louis	155	905	1469	122	851	38	.275	6
St. Louis	155	669	1440	63	609	59	.272	13
St. Louis	154	710	1404	79	658	19	.267	9
Philadelphia	154	729	1345	67	684	39	.260	9
St. Louis	154	559	1302	55	524	44	.246	15
St. Louis	154	578	1245	32	530	74	.243	13

CLUB BATTING

	g.	r.	h.	hr.	rbi.	sb.	avg.	out
Boston	154	734	1456	95	693	44	.275	5
Pittsburgh	156	706	1397	108	645	61	.264	4
St. Louis	155	739	1399	105	689	25	.264	7
Brooklyn	155	732	1404	91	667	113	.263	7
Chicago	155	597	1401	87	557	39	.262	16
New York	155	789	1352	161	743	51	.257	7
Philadelphia	155	582	1351	94	555	62	.255	12
Cincinnati	153	590	1276	104	541	43	.249	14

National League Pennant Winners

Year	Club	Manager	Won	Lost	Pct.	Year	Club	Manager	Won	Lost	Pct.
1876	Chicago	Albert G. Spalding	52	14	.788	1913	New York	John J. McGraw	101	51	.664
1877	Boston	Harry Wright	31	17	.646	1914*	Boston	George T. Stallings	94	59	.614
1878	Boston	Harry Wright	41	19	.683	1915	Philadelphia	Patrick J. Moran	90	62	.592
1879	Providence	George Wright	59	25	.702	1916	Brooklyn	Wilbert Robinson	94	60	.610
1880	Chicago	Adrian C. Anson	67	17	.798	1917	New York	John J. McGraw	98	56	.636
1881	Chicago	Adrian C. Anson	56	28	.667	1918	Chicago	Fred L. Mitchell	84	45	.651
1882	Chicago	Adrian C. Anson	55	29	.655	1919*	Cincinnati	Patrick J. Moran	96	44	.684
1883	Boston	John F. Morrill	63	35	.643	1920	Brooklyn	Wilbert Robinson	93	61	.606
1884	Providence	Frank C. Bancroft	84	28	.750	1921*	New York	John J. McGraw	94	59	.614
1885	Chicago	Adrian C. Anson	87	25	.777	1922*	New York	John J. McGraw	93	61	.604
1886	Chicago	Adrian C. Anson	90	34	.726	1923	New York	John J. McGraw	95	58	.621
1887	Detroit	W. H. Watkins	79	45	.637	1924	New York	John J. McGraw	93	60	.608
1888	New York	James J. Mutrie	84	47	.641	1925*	Pittsburgh	William B. McKechnie	95	58	.621
1889	New York	James J. Mutrie	83	43	.659	1926*	St. Louis	Rogers Hornsby	89	65	.572
1890	Brooklyn	William H. McGunnigle	86	43	.667	1927	Pittsburgh	Owen J. Bush	94	60	.610
1891	Boston	Frank G. Selee	87	51	.630	1928	St. Louis	William B. McKechnie	95	59	.617
1892	Boston	Frank G. Selee	102	48	.680	1929	Chicago	Joseph V. McCarthy	98	54	.645
1893	Boston	Frank G. Selee	86	43	.667	1930	St. Louis	Charles E. Street	92	62	.597
1894	Baltimore	Edward H. Hanlon	89	39	.695	1931*	St. Louis	Charles E. Street	101	53	.656
1895	Baltimore	Edward H. Hanlon	87	43	.669	1932	Chicago	Charles J. Grimm	90	64	.584
1896	Baltimore	Edward H. Hanlon	90	39	.698	1933*	New York	William H. Terry	91	61	.599
1897	Boston	Frank G. Selee	93	39	.705	1934*	St. Louis	Frank F. Frisch	95	58	.621
1898	Boston	Frank G. Selee	102	47	.685	1935	Chicago	Charles J. Grimm	100	54	.649
1899	Brooklyn	Edward H. Hanlon	88	42	.677	1936	New York	William H. Terry	92	62	.597
1900	Brooklyn	Edward H. Hanlon	82	54	.603	1937	New York	William H. Terry	95	57	.625
1901	Pittsburgh	Fred C. Clarke	90	49	.647	1938	Chicago	Charles L. Hartnett	89	63	.586
1902	Pittsburgh	Fred C. Clarke	103	36	.741	1939	Cincinnati	William B. McKechnie	97	57	.630
1903	Pittsburgh	Fred C. Clarke	91	49	.650	1940*	Cincinnati	William B. McKechnie	100	53	.654
1904	New York	John J. McGraw	106	47	.693	1941	Brooklyn	Leo E. Durocher	100	54	.649
1905*	New York	John J. McGraw	105	48	.686	1942*	St. Louis	William H. Southworth	106	48	.688
1906	Chicago	Frank L. Chance	116	36	.763	1943	St. Louis	William H. Southworth	105	49	.682
1907*	Chicago	Frank L. Chance	107	45	.704	1944*	St. Louis	William H. Southworth	105	49	.682
1908*	Chicago	Frank L. Chance	99	55	.643	1945	Chicago	Charles J. Grimm	98	56	.636
1909*	Pittsburgh	Fred C. Clarke	110	42	.724	1946*	St. Louis	Edwin H. Dyer	98	58	.628
1910	Chicago	Frank L. Chance	104	50	.675	1947	Brooklyn	Burton E. Shotton	94	60	.610
1911	New York	John J. McGraw	99	54	.647	1948	Boston	William H. Southworth	91	62	.595
1912	New York	John J. McGraw	103	48	.682						

*World Series winner.

American League Pennant Winners

Year	Club	Manager	Won	Lost	Pct.	Year	Club	Manager	Won	Lost	Pct.
1901	Chicago	Clark C. Griffith	83	53	.610	1925	Washington	Stanley R. Harris	96	55	.636
1902	Philadelphia	Connie Mack	83	53	.610	1926	New York	Miller J. Huggins	91	63	.591
1903*	Boston	James J. Collins	91	47	.659	1927*	New York	Miller J. Huggins	110	44	.714
1904	Boston	James J. Collins	95	59	.617	1928*	New York	Miller J. Huggins	101	53	.656
1905	Philadelphia	Connie Mack	92	56	.622	1929*	Philadelphia	Connie Mack	104	46	.693
1906*	Chicago	Fielder A. Jones	93	58	.616	1930*	Philadelphia	Connie Mack	102	52	.662
1907	Detroit	Hugh A. Jennings	92	58	.613	1931	Philadelphia	Connie Mack	107	45	.704
1908	Detroit	Hugh A. Jennings	90	63	.588	1932*	New York	Joseph V. McCarthy	107	47	.695
1909	Detroit	Hugh A. Jennings	98	54	.645	1933	Washington	Joseph E. Cronin	99	53	.657
1910*	Philadelphia	Connie Mack	102	48	.680	1934	Detroit	Gordon S. Cochrane	101	53	.656
1911*	Philadelphia	Connie Mack	101	50	.669	1935*	Detroit	Gordon S. Cochrane	93	58	.616
1912*	Boston	J. Garland Stahl	105	47	.691	1936*	New York	Joseph V. McCarthy	102	51	.667
1913*	Philadelphia	Connie Mack	96	57	.627	1937*	New York	Joseph V. McCarthy	102	52	.662
1914	Philadelphia	Connie Mack	99	53	.651	1938*	New York	Joseph V. McCarthy	99	53	.651
1915*	Boston	William F. Carrigan	101	50	.669	1939*	New York	Joseph V. McCarthy	106	45	.702
1916*	Boston	William F. Carrigan	91	63	.591	1940	Detroit	Delmar D. Baker	90	64	.584
1917*	Chicago	Clarence H. Rowland	100	54	.649	1941*	New York	Joseph V. McCarthy	101	53	.656
1918*	Boston	Edward G. Barrow	75	51	.595	1942	New York	Joseph V. McCarthy	103	51	.669
1919	Chicago	William Gleason	88	52	.629	1943*	New York	Joseph V. McCarthy	98	56	.636
1920*	Cleveland	Tris E. Speaker	98	56	.636	1944	St. Louis	James L. Sewell	89	65	.578
1921	New York	Miller J. Huggins	98	55	.641	1945*	Detroit	Stephen F. O'Neill	88	65	.575
1922	New York	Miller J. Huggins	94	60	.610	1946	Boston	Joseph E. Cronin	104	50	.676
1923*	New York	Miller J. Huggins	98	54	.645	1947*	New York	Stanley R. Harris	97	57	.630
1924*	Washington	Stanley R. Harris	92	62	.597	1948*	Cleveland	Louis Boudreau	97	58	.625

*World Series winner.

Dodgers-Yankees Attract Record Crowd

An exhibition baseball game between the Brooklyn Dodgers and the New York Yankees at the Yankee Stadium on April

18, 1948, attracted 62,369 fans, a record for a pre-season contest. The Dodgers won 5 to 3.

National League Batting Champions

(Based on minimum of 100 games played.)

	Avg.	Year		Avg.	Year		Avg.
R. Barnes, Chi.	403	1900—J. P. Wagner, Pitts.	380	1925—Rogers Hornsby, St. L.	403		
J. L. White, Bos.	385	1901—J. Burkett, St. L.	382	1926—Eugene Hargrave, Cle.	353		
A. Dalrymple, Mil.	356	1902—C. H. Beaumont, Pitts.	357	1927—Paul G. Waner, Pitts.	380		
A. C. Anson, Chi.	407	1903—J. P. Wagner, Pitts.	355	1928—Rogers Hornsby, Bos.	387		
G. F. Gore, Chi.	365	1904—J. P. Wagner, Pitts.	349	1929—Frank J. O'Doul, Phila.	398		
A. C. Anson, Chi.	399	1905—J. B. Seymour, Cin.	377	1930—Wm. H. Terry, N. Y.	401		
D. Brouthers, Buf.	367	1906—J. P. Wagner, Pitts.	339	1931—C. J. Hafey, St. L.	349		
D. Brouthers, Buf.	371	1907—J. P. Wagner, Pitts.	350	1932—F. J. O'Doul, Bklyn.	368		
J. O'Rourke, Buf.	350	1908—J. P. Wagner, Pitts.	354	1933—C. H. Klein, Phila.	368		
R. Connor, N. Y.	371	1909—J. P. Wagner, Pitts.	339	1934—P. G. Waner, Pitts.	362		
M. J. Kelly, Chi.	388	1910—S. N. Magee, Phila.	331	1935—F. Vaughan, Pitts.	385		
A. C. Anson, Chi.	421	1911—J. P. Wagner, Pitts.	334	1936—P. G. Waner, Pitts.	373		
A. C. Anson, Chi.	343	1912—H. Zimmerman, Chi.	372	1937—J. M. Medwick, St. L.	374		
D. Brouthers, Bos.	373	1913—J. Daubert, Bklyn.	350	1938—E. N. Lombardi, Cin.	342		
J. Glasscock, N. Y.	336	1914—J. Daubert, Bklyn.	329	1939—J. R. Mize, St. L.	349		
W. Hamilton, Phila.	338	1915—L. Doyle, N. Y.	320	1940—D. Garmis, Pitts.	355		
C. Childs, Cleve.	335	1916—H. Chase, Cin.	339	1941—H. P. Reiser, Bklyn.	343		
D. Brouthers, Bklyn.	335	1917—E. J. Roush, Cin.	341	1942—E. N. Lombardi, Bos.	330		
Hugh Duffy, Bos.	378	1918—Z. D. Wheat, Bklyn.	335	1943—S. F. Musial, St. L.	357		
Hugh Duffy, Bos.	438	1919—E. J. Roush, Cin.	321	1944—F. Walker, Bklyn.	357		
J. Burkett, Cleve.	423	1920—Rogers Hornsby, St. L.	370	1945—P. J. Cavarretta, Chicago.	355		
J. Burkett, Cleve.	410	1921—Rogers Hornsby, St. L.	397	1946—S. F. Musial, St. L.	365		
W. Keeler, Balt.	432	1922—Rogers Hornsby, St. L.	401	1947—H. W. Walker, Phila.	363		
W. Keeler, Balt.	379	1923—Rogers Hornsby, St. L.	384	1948—S. F. Musial, St. L.	376		
E. J. Delahanty, Phila.	408	1924—Rogers Hornsby, St. L.	424				

American League Batting Champions

(Based on minimum of 100 games played.)

	Avg.	Year		Avg.	Year		Avg.
N. Lajoie, Phila.	405	1917—T. R. Cobb, Det.	383	1933—J. E. Foxx, Phila.	356		
E. J. Delahanty, Wash.	376	1918—T. R. Cobb, Det.	382	1934—H. L. Gehrig, N. Y.	363		
N. Lajoie, Cleve.	355	1919—T. R. Cobb, Det.	384	1935—C. S. Myer, Wash.	349		
N. Lajoie, Cleve.	381	1920—G. H. Sisler, St. L.	407	1936—L. B. Appling, Chi.	388		
Elmer Flick, Cleve.	306	1921—H. E. Heilmann, Det.	394	1937—C. L. Gehringer, Det.	371		
G. Stone, St. L.	358	1922—G. H. Sisler, St. L.	420	1938—J. E. Foxx, Bos.	349		
T. R. Cobb, Det.	350	1923—H. E. Heilmann, Det.	403	1939—J. P. DiMaggio, N. Y.	381		
T. R. Cobb, Det.	324	1924—G. H. Ruth, N. Y.	378	1940—J. P. DiMaggio, N. Y.	352		
T. R. Cobb, Det.	377	1925—H. E. Heilmann, Det.	393	1941—T. S. Williams, Bos.	406		
T. R. Cobb, Det.	385	1926—H. E. Manush, Det.	378	1942—T. S. Williams, Bos.	356		
T. R. Cobb, Det.	420	1927—H. E. Heilmann, Det.	398	1943—L. B. Appling, Chi.	328		
T. R. Cobb, Det.	410	1928—L. A. Goslin, Wash.	379	1944—L. Boudreau, Cleve.	327		
T. R. Cobb, Det.	390	1929—L. A. Fonseca, Cleve.	369	1945—G. H. Stirnweiss, N. Y.	309		
T. R. Cobb, Det.	368	1930—A. H. Simmons, Phila.	381	1946—J. B. Vernon, Wash.	353		
T. R. Cobb, Det.	369	1931—A. H. Simmons, Phila.	390	1947—T. S. Williams, Bos.	343		
T. Speaker, Cleve.	386	1932—D. Alexander, Det.-Bos.	367	1948—T. S. Williams, Bos.	369		

RUTH'S BASEBALL EARNINGS

Club	Salary	Year	Club	Salary
Baltimore (I) \$	600	1926	New York (A)	52,000
Boston (A)...	1,300	1927	New York (A)	70,000
Boston (A)...	3,500	1928	New York (A)	70,000
Boston (A)...	3,500	1929	New York (A)	70,000
Boston (A)...	5,000	1930	New York (A)	80,000
Boston (A)...	7,000	1931	New York (A)	75,000
Boston (A)...	10,000	1932	New York (A)	50,000
New York (A)	20,000	1933	New York (A)	35,000
New York (A)	30,000	1934	Boston (N)	40,000
New York (A)	52,000	1935	Brooklyn (N)	15,000
New York (A)	52,000			
New York (A)	52,000			
			Total	\$925,900

bought by Boston Americans from Baltimore and
ed to Providence (I). †Coach.
th's share from ten world series amounted to
45. In addition, he was reputed to have made
0,000 from endorsements, barnstorming tours,
es and radio appearances.

National Baseball Congress Champions

Source: Ray Dumont, Wichita, Kansas.

1935—Bismarck (N. D.) Corwin-Churchill
1936—Duncan (Okla.) Halliburtons
1937—Enid (Okla.) Eason Oilers
1938—Buford (Ga.) Bona Allens
1939—Duncan (Okla.) Halliburtons
1940—Enid (Okla.) Champions
1941—Enid (Okla.) Champions
1942—Wichita (Kans.) Boeing Bombers
1943—Camp Wheeler (Ga.) Spokes
1944—Sherman Field (Kans.) Flyers
1945—Enid (Okla.) Army Air Field
1946—St. Joseph (Mich.) Autos
1947—Ft. Wayne (Ind.) General Electrics
1948—Ft. Wayne (Ind.) General Electrics

Major League Individual All-Time Records

Highest batting average, season—Hugh Duffy, Boston (N), 1894	438	Most 3-base hits, season—J. Owen Wilson, Pittsburgh (N), 1912	36
Highest batting average (10 or more years)—Ty Cobb, Detroit and Philadelphia (A), 1905-28	367	Most 2-base hits—Tris E. Speaker, Boston, Cleveland, Washington, Philadelphia (A), 1907-28	793
Most years batting .300 or better—Ty Cobb	23	Most 2-base hits, season—Earl W. Webb, Boston (A), 1931	6
Most hits—Ty Cobb	4,191	Most runs—Ty Cobb	2,244
Most hits, season—George Sisler, St. Louis (A), 1920	257	Most runs batted in—Babe Ruth	2,209
Most consecutive hits, game—Wilbert Robinson, Baltimore (N), 1892	7	Most runs batted in, season—Hack Wilson, Chicago (N), 1930	190
Most hits in succession—Frank Higgins, Boston (A), 1938	12	Most runs batted in, single game—James L. Bottomley, St. Louis (N) vs. Brooklyn, Sept. 16, 1924	12
Most consecutive games batted safely—Joe DiMaggio, New York (A), May 15 to July 16, 1941, inclusive	56	Most games played—Ty Cobb	3,033
Most long hits—Babe Ruth, Boston and New York (A), Boston (N), 1914-35 (506 2b, 136 3b, 714 home runs)	1,356	Most consecutive games played—Lou Gehrig, New York (A). Streak started June 1, 1925, and stopped May 2, 1939	2,130
Most total bases—Ty Cobb	5,863	Longest service as player—Eddie Collins, Philadelphia and Chicago (A), 1906-30; Bobby Wallace, Cleveland (N) and St. Louis (A), 1894-1918	25 years
Most total bases, season—Babe Ruth, New York (A), 1921	457	Most times at bat—Ty Cobb	11,429
Most total bases, game—Bobby Lowe, Boston (N), 1894; Ed Delahanty, Philadelphia (N), 1896 (both hit 4 home runs, 1 single)	17	Most bases on balls—Babe Ruth	2,056
Most home runs—Babe Ruth	714	Most bases on balls, season—Babe Ruth, 1923	170
Most home runs, season—Babe Ruth, New York (A), 1927	60	Most bases on balls, game (modern record)—Jimmy Foxx, Boston (A), 1938	6
Most home runs, single game—Bobby Lowe, Boston (N), 1894; Ed Delahanty, Philadelphia (N), 1896; Lou Gehrig, New York (A), 1932; Chuck Klein, Philadelphia (N), 1936 (10 innings); Pat Seerey, Chicago (A), 1948 (11 innings)	4	Most stolen bases—Ty Cobb	892
Most 3-base hits—Sam Crawford, Cincinnati (N), 1899-1902; Detroit (A), 1903-17	312	Most stolen bases, season (modern record)—Ty Cobb, Detroit (A), 1915	96

PITCHING

Most games—Cy Young (472 in National League, 402 in American League), 1890-1911	874	Most games won, season (modern record)—Jack Chesbro, New York (A), 1904	41
Most games won—Cy Young, Cleveland (N), 1890-98; St. Louis (N), 1899-1900; Boston (A), 1901-08; Cleveland (A), 1909-11 (part); Boston (N), 1911 (part)	511	Most consecutive games won, season—Tim Keefe, New York (N), 1888; Rube Marquard, New York (N), 1912	15
Most complete games, season—Jack Chesbro, New York (A), 1904	48	Most shutout games—Walter Johnson, Washington (A), 1907-27	113
Most games, season (modern record)—Ace Adams, New York (N), 1943	70	Most shutout games, season—Grover Alexander, Philadelphia (N), 1916	16
Most innings, season—Ed Walsh, Chicago (A), 1908	464	Most consecutive shutout innings—Walter Johnson, 1913	56
Lowest earned-run average, season—Ferdie Schupp, New York (N), 1916	0.90	Most strikeouts—Walter Johnson	3,497
Fewest hits in two consecutive games—John Vander Meer, Cincinnati (N), 1938 (both no-hit games)	0	Most strikeouts, season (modern record)—Bobby Feller, Cleveland (A), 1946	348
		Most strikeouts in 9 innings (1901 to date)—Bobby Feller, Cleveland (A) vs. Detroit, Oct. 2, 1938	13

RECORD OF MAJOR LEAGUE ALL-STAR GAMES

Date	Winning league and pitcher	Runs	Losing league and pitcher	Runs	Where held	Paid attendance	Receipts
6, 1933	American (Gomez).....	4	National (Hallahan).....	2	Chicago (A).....	49,200	\$51,203.50*
10, 1934	American (Harder).....	9	National (Mungo).....	7	New York (N).....	48,363	52,982.00
8, 1935	American (Gomez).....	4	National (Walker).....	1	Cleveland (A).....	69,812	82,179.12
7, 1936	National (J. Dean).....	4	American (Grove).....	3	Boston (N).....	25,556	24,588.80
7, 1937	American (Gomez).....	8	National (J. Dean).....	3	Washington (A).....	31,391	28,475.18
6, 1938	National (Vander Meer).....	4	American (Gomez).....	1	Cincinnati (N).....	27,067	38,469.05
11, 1939	American (Bridges).....	3	National (Lee).....	1	New York (A).....	62,892	75,701.00
9, 1940	National (Derringer).....	4	American (Ruffing).....	0	St. Louis (N).....	32,373	36,723.03
8, 1941	American (Smith).....	7	National (Passeau).....	5	Detroit (A).....	54,674	63,267.08
6, 1942	American (Chandler).....	3	National (M. Cooper).....	1	New York (N).....	33,694	86,102.98†
13, 1943	American (Leonard).....	5	National (M. Cooper).....	3	Philadelphia (A).....	31,938	65,674.00†
11, 1944	National (Raffensberger).....	7	American (Hughson).....	1	Pittsburgh (N).....	29,589	81,275.00
5—No game.							
9, 1946	American (Feller).....	12	National (Passeau).....	0	Boston (A).....	34,906	89,071.00
8, 1947	American (Shea).....	2	National (Sain).....	1	Chicago (N).....	41,123	105,314.90

*An additional \$5,175 was received for radio rights. †Additional funds were received from other sources.

Box Score of 1948 All-Star Game

At Sportsman's Park, St. Louis, July 13

National League

American League

	bats	ab.	r.	h.	po.	a.	e.		bats	ab.	r.	h.	po.	a.	e.
HUBURN, Philadelphia, cf	L	4	1	2	1	0	0	MULLIN, Detroit, rf	L	1	0	0	0	0	0
NER, Pittsburgh, lf	R	1	0	0	1	0	0	eDIMAGGIO, New York	R	1	0	0	0	0	0
HOENDIENST, St. Louis, 2b	R	4	0	0	1	0	0	ZARILLA, St. Louis, rf	L	2	0	0	2	0	0
ONEY, New York, 2b	R	0	0	0	2	0	0	HENRICH, New York, lf	L	3	0	0	1	0	0
MUSIAL, St. Louis, lf-of	L	4	1	2	3	0	0	BOUDREAU, Cleveland, ss	R	2	0	0	2	0	0
ZE, New York, 1b	L	4	0	1	4	1	0	STEPHENS, Boston, ss	R	2	0	1	0	0	0
LAUGHTER, St. Louis, rf	L	2	0	1	2	0	0	GORDON, Cleveland, 2b	R	2	0	0	1	2	0
LAMES, Boston, rf	L	1	0	0	1	0	0	DOERR, Boston, 2b	R	2	0	0	0	3	0
FKO, Chicago, 3b	R	2	0	0	0	0	0	EVERS, Detroit, cf	R	4	1	1	0	0	0
LIOTTE, Boston, 3b	R	2	0	1	0	0	0	KELTNER, Cleveland, 3b	R	3	1	1	1	6	0
OPER, New York, c	R	2	0	0	3	0	0	McQUINN, New York, 1b	L	4	1	2	14	0	0
SI, Boston, c	R	2	0	1	4	0	0	ROSAR, Philadelphia, c	R	1	0	0	1	0	0
ESE, Brooklyn, ss	R	2	0	0	2	2	0	TEBBETTS, Boston, c	R	1	1	0	5	1	0
RR, New York, ss	R	2	0	0	1	0	0	MASTERSON, Washington, p	R	0	0	0	0	0	0
ANCA, Brooklyn, p	R	1	0	0	0	0	0	eVERNON, Washington	L	0	1	0	0	0	0
USTINE, Pittsburgh	R	1	0	0	0	0	0	RASCHI, New York, p	R	1	0	1	0	1	0
HMITZ, Chicago, p	R	0	0	0	0	0	0	WILLIAMS, Boston	L	0	0	0	0	0	0
IN, Boston, p	R	0	0	0	0	0	0	eNEWHOUSE, Detroit	L	0	0	0	0	0	0
AITKUS, Chicago	L	0	0	0	0	0	0	COLEMAN, Philadelphia, p	R	0	0	0	0	1	0
ACKWELL, Cincinnati, p	R	0	0	0	0	0	0								
THOMSON, New York	R	1	0	0	0	0	0								
Totals		35	2	8	24	4	0	Totals		29	5	6	27	14	0

Struck out for Branca in fourth. bWalked for Sain in sixth. cStruck out for Blackwell in ninth. dWalked for Peterson in third. eFlied out for Mullin in fourth. fWalked for Raschi in sixth. gRan for Williams in sixth.

Nationals	2	0	0	0	0	0	0	0—2
Americans	0	1	1	3	0	0	0	x—5

Runs batted in—Musial 2, Evers, Boudreau, Raschi 2, DiMaggio.
Home runs—Musial, Evers. Stolen bases—Ashburn, Vernon, Mullin, McQuinn. Sacrifice—Coleman. Left on bases—Nationals 10, Americans 8. Bases on balls—Off Masterson 1 (Slaughter); Raschi 1 (Waitkus); Coleman 2 (Musial, Evers); Branca 3 (Keltner, Vernon, Mullin); Schmitz 1 (Tebbetts); Blackwell 3 (Williams, Henrich, Tebbetts).
Pitching summary—By Branca 3 (Mullin, Henrich 2); Sain 3 (Stephens, Doerr, Evers); Blackwell 1 (Tebbetts); Masterson 1 (Evers); Raschi 3 (Gustline, Musial, Ashburn); Coleman 3 (Mize, Kerr, Thomson).
Pitching summary—Off Masterson 2 runs, 5 hits in 3 innings; Raschi 0 runs, 3 hits in 3; Coleman 0 runs, 0 hits in 3; Branca 2 runs, 1 hit in 3; Schmitz 3 runs, 3 hits in 1/3; Sain 0 runs, 0 hits in 1/2; Blackwell 0 runs, 2 hits in 1. Wild pitch—Masterson. Winning pitcher—Raschi. Losing pitcher—Schmitz.
Umpires—Berry (A), plate; Stewart (N), 1b; Paparella (A), 2b; Reardon (N), 3b (first four and one-half innings); Reardon, plate; Paparella, 1b; Stewart, 2b; Berry, 3b (last half of game). Time—2:27. Attendance—34,009. Receipts—\$447.07.

HOME ATTENDANCE FIGURES

American League
(Official)Other club
records

	1948	1947
Cleveland	2,620,627*	1,521,978
New York	2,373,901†	2,178,937
Boston	1,743,035†	1,398,093
Philadelphia	1,558,798†	1,427,315
Washington	945,076†	911,566
Chicago	795,254	860,758
St. Louis	777,844	876,948
Pittsburgh	335,564	320,474

Totals11,150,099* 9,486,069

All-time record. †Club record.

National League
(Unofficial)Other club
records

	1948	1947
Pittsburgh	1,515,058†	1,283,531
New York	1,453,754	1,600,793†
Brooklyn	1,398,967	1,807,526†
Boston	1,390,674†	1,277,361
Chicago	1,259,541	1,364,039
St. Louis	1,111,439	1,247,913†
Cincinnati	860,323	899,975
Philadelphia	803,271	907,332

Totals9,793,027 10,368,470*

Grand totals20,943,345* 19,874,539

Minor League Baseball

Source: Robert L. Finch, Publicity Director, National Assn. of Professional Baseball Leagues.

JUNIOR WORLD SERIES

Montreal (IL) vs. St. Paul (AA)

- *First game—St. Paul 4, Montreal 0.
- *Second game—Montreal 7, St. Paul 3.
- *Third game—Montreal 15, St. Paul 1.
- Fourth game—Montreal 8, St. Paul 3.
- Fifth game—Montreal 7, St. Paul 2.

*At St. Paul.

FINAL STANDING OF THE CLUBS

	Won	Lost	Pct.
Montreal Royals	4	1	.800
St. Paul Saints	1	4	.200

DIXIE SERIES

Birmingham (SA) vs. Fort Worth (TL)

- *First game—Fort Worth 5, Birmingham 1.
- *Second game—Birmingham 8, Fort Worth 4.
- Third game—Birmingham 5, Fort Worth 4.
- Fourth game—Birmingham 5, Fort Worth 3.
- Fifth game—Birmingham 3, Fort Worth 1.

*At Birmingham.

FINAL STANDING OF THE CLUBS

	Won	Lost	Pct.
Birmingham Barons	4	1	.800
Fort Worth Cats	1	4	.200

JUNIOR SERIES RECORD

International League (I) vs. American Assn. (AA)

Year	Winner	Games won	Loser	Games won
1904	Buffalo, I.	2	St. Paul, AA.	1
1906*	Buffalo, I.	3	Columbus, AA.	2
1907	Toronto, I.	4	Columbus, AA.	1
1917	Indianapolis, AA.	4	Toronto, I.	1
1919	Vernon, PC.	5	St. Paul, AA.	4
1920	Baltimore, I.	5	St. Paul, AA.	1
1921	Louisville, AA.	5	Baltimore, I.	3
1922	Baltimore, I.	5	St. Paul, AA.	2
1923	Kansas City, AA.	5	Baltimore, I.	4
1924*	St. Paul, AA.	5	Baltimore, I.	4
1925	Baltimore, I.	5	Louisville, AA.	3
1926	Toronto, I.	5	Louisville, AA.	0
1927	Toledo, AA.	5	Buffalo, I.	1
1928*	Indianapolis, AA.	5	Rochester, I.	1
1929	Kansas City, AA.	5	Rochester, I.	4
1930	Rochester, I.	5	Louisville, AA.	3
1931	Rochester, I.	5	St. Paul, AA.	3
1932	Newark, I.	4	Minneapolis, AA.	2
1933	Columbus, AA.	5	Buffalo, I.	3
1934	Columbus, AA.	5	Toronto, I.	4
1936	Milwaukee, AA.	4	Buffalo, I.	1
1937	Newark, I.	4	Columbus, AA.	3
1938	Kansas City, AA.	4	Newark, I.	3
1939	Louisville, AA.	4	Rochester, I.	3
1940	Newark, I.	4	Louisville, AA.	2
1941	Columbus, AA.	4	Montreal, I.	2
1942	Columbus, AA.	4	Syracuse, I.	1
1943	Columbus, AA.	4	Syracuse, I.	1
1944	Baltimore, I.	4	Louisville, AA.	2
1945	Louisville, AA.	4	Newark, I.	2
1946	Montreal, I.	4	Louisville, AA.	2
1947	Milwaukee, AA.	4	Syracuse, I.	3
1948	Montreal, I.	4	St. Paul, AA.	1

*Played tie game.

PENNANT WINNERS IN 1948

CLASS AAA

League and champion	Play-off winner
AMERICAN ASSOCIATION—Indianapolis	St. Paul
INTERNATIONAL—Montreal (Quebec)	Montreal
PACIFIC COAST—Oakland (Calif.)	Oakland

CLASS AA

SOUTHERN ASSOCIATION—Nashville	Birmingham (Ala.)
TEXAS—Fort Worth	Fort Worth*

CLASS A

CENTRAL—Flint (Mich.)	Dayton (Ohio)
EASTERN—Scranton (Pa.)	Scranton
SOUTH ATLANTIC—Charleston (S. C.)	Greenville (S. C.)
WESTERN—Des Moines (Iowa)	Sioux City (Iowa)

CLASS B

BIG STATE—Sherman-Denison (Texas)	Sherman-Denison
COLONIAL—Port Chester (N. Y.)	Port Chester
INTER-STATE—Wilmington (Del.)	Trenton (N. J.)
NEW ENGLAND—Lynn (Mass.)	Nashua (N. H.)
PIEDMONT—Lynchburg (Va.)	Newport News (Va.)
SOUTHEASTERN—Montgomery (Ala.)	Montgomery
THREE-I—Quincy (Ill.)	Evansville (Ind.)
TRI-STATE—Asheville (N. C.)	Fayetteville (N. C.)
WESTERN INTERNATIONAL—Spokane (Wash.)	None held

CLASS C

ARIZONA-TEXAS—Globe-Miami (Ariz.)	Globe-Miami*
BORDER—Ottawa (Ontario)	Ogdensburg (N. Y.)
CALIFORNIA—Fresno	Santa Barbara
CANADIAN-AMERICAN—Rome (N. Y.)	Oneonta (N. Y.)
CAROLINA—Raleigh (N. C.)	Martinsville (Va.)
CENTRAL ASSOCIATION—Clinton (Iowa)	Clinton
COTTON STATES—Greenwood (Miss.)	Hot Springs (Ark.)
FLORIDA INTERNATIONAL—Havana (Cuba)	Havana
LONE STAR—Kilgore (Texas)	Kilgore
MID-ATLANTIC—Vandergrift (Pa.)	Erie (Pa.)
NORTHERN—Grand Forks (N. D.)	Grand Forks
PIONEER—Pocatello (Idaho)	Twin Falls (Idaho)
SUNSET—Mexicali (Mexico)	Reno (Nev.)
WESTERN ASSOCIATION—St. Joseph (Mo.)	St. Joseph
W. TEXAS-N. MEXICO—Albuquerque	Amarillo

CLASS D

ALABAMA STATE—Troy	Dothan
APPALACHIAN—Pulaski (Va.)	Pulaski
BLUE RIDGE—Galax (Va.)	Mount Airy (N. C.)
COASTAL PLAIN—Tarboro (N. C.)	Tarboro
EASTERN SHORE—Salisbury (Md.)	Milford (Del.)
EVANGELINE—Houma (La.)	None held
FAR WEST—Oroville (Calif.)	Santa Rosa (Calif.)
FLORIDA STATE—Orlando	Daytona Beach
GEORGIA-ALABAMA—Lanett (Ala.)	Lanett
GEORGIA-FLORIDA—Waycross (Ga.)	Waycross
GEORGIA STATE—Sparta	Fitzgerald
ILLINOIS STATE—West Frankfort	West Frankfort
KANSAS-OKLA.-MO.—Ponca City	Independence
KITTY—Hopkinsville (Ky.)	Union City (Tenn.)
LONGHORN—Big Spring (Texas)	Midland (Texas)
MOUNTAIN STATES—Hazard (Ky.)	Morristown (Tenn.)
NORTH ATLANTIC—Peekskill (N. Y.)	Carbondale (Pa.)
NORTH CAROLINA STATE—Thomasville	Statesville
OHIO-INDIANA—Zanesville (Ohio)	Zanesville
PONY—Lockport (N. Y.)	Lockport
SOONER STATE—McAlester (Okla.)	Seminole (Okla.)
TOBACCO STATE—Sanford (N. C.)	Red Springs (N. C.)
VIRGINIA—Suffolk	Blackstone
WESTERN CAROLINA—Lincolnton (N. C.)	Lincolnton
WISCONSIN STATE—Sheboygan	None held

*Play-offs determine champion.

FINAL 1948 REGULAR SEASON STANDINGS

AMERICAN ASSOCIATION (AAA)

	w.	l.	pct.		w.	l.	pct.
Indianapolis	100	54	.649	Minneapolis	77	77	.500
Milwaukee	89	65	.578	Kansas City	64	88	.421
St. Paul	86	68	.558	Toledo	61	91	.401
Columbus	81	73	.526	Louisville	56	98	.364

INTERNATIONAL LEAGUE (AAA)

	w.	l.	pct.		w.	l.	pct.
Montreal	94	59	.614	Toronto	78	76	.506
Newark	80	72	.526	Buffalo	71	80	.470
Syracuse	77	73	.513	Jersey City	69	83	.454
Rochester	78	75	.510	Baltimore	59	88	.401

PACIFIC COAST LEAGUE (AAA)

	w.	l.	pct.		w.	l.	pct.
Oakland	114	74	.606	Portland	89	99	.473
San Francisco	112	76	.596	Hollywood	84	104	.447
Los Angeles	102	86	.543	San Diego	83	105	.442
Seattle	93	95	.495	Sacramento	75	113	.399

SOUTHERN ASSOCIATION (AA)

	w.	l.	pct.		w.	l.	pct.
Nashville	95	58	.621	New Orleans	70	83	.458
Memphis	92	61	.601	Atlanta	69	85	.448
Birmingham	84	69	.549	Little Rock	67	83	.447
Mobile	75	75	.500	Chattanooga	58	96	.377

TEXAS LEAGUE (AA)

	w.	l.	pct.		w.	l.	pct.
Fort Worth	92	61	.601	San Antonio	75	76	.4966
Tulsa	91	63	.591	Oklahoma City	70	84	.455
Houston	82	71	.536	Dallas	64	89	.418
Shreveport	76	77	.4967	Beaumont	61	90	.404

TOP ALL-TIME HOME-RUN HITTERS

	American League	Total
Babe Ruth	714	714
Jimmy Foxx	534	534
Lou Gehrig	494	494
Hank Greenberg	309	309
Al Simmons	307	307
Joe DiMaggio	303	303
Bob Johnson	288	288
Rudy York	277	277
Goose Goslin	248	248
Hal Trosky	228	228

National League

	Total
Mel Ott	511
Chuck Klein	300
Rogers Hornsby	299
Johnny Mize	297
Fred (Cy) Williams	251
Hack Wilson	244
Wally Berger	242
Dolph Camilli	237
Gabby Hartnett	236
Jim Bottomley	206

NOTE—Several of the players were active in both leagues. Combined totals are credited to the league in which they served longest.

Red Sox Tie Scoring Mark

On July 4 the Boston Red Sox equaled the modern major league record for scoring in one inning by tallying 14 times against the Philadelphia Athletics in the seventh frame. The Red Sox won the game, 19 to 5. The all-time record for runs per inning is 18, made by the Chicago Cubs in 1883.

CENTRAL LEAGUE (A)

	w.	l.	pct.		w.	l.	pct.
Flint	89	49	.645	Fort Wayne	64	76	.457
Dayton	84	55	.604	Saginaw	55	85	.393
Muskegon	73	66	.525	Grand Rapids	52	86	.377

EASTERN LEAGUE (A)

	w.	l.	pct.		w.	l.	pct.
Seranton	88	52	.629	Williamsport	73	67	.521
Albany	86	54	.614	Binghamton	58	82	.414
Utica	84	53	.604	Elmira	49	91	.350
*Hartford	73	67	.521	Wilkes-Barre	48	91	.345

*Won fourth-place play-off.

SOUTH ATLANTIC (SALLY) LEAGUE (A)

	w.	l.	pct.		w.	l.	pct.
Charleston	87	65	.572	Jacksonville	78	75	.510
Macon	86	68	.558	Columbus	65	83	.439
Greenville	84	69	.549	Augusta	67	87	.424
Columbia	79	72	.523	Savannah	63	87	.420

WESTERN LEAGUE (A)

	w.	l.	pct.		w.	l.	pct.
Des Moines	76	64	.543	Sioux City	69	68	.504
Denver	70	67	.511	Pueblo	69	70	.497
*Lincoln	69	68	.504	Omaha	62	78	.443

*Won third-place play-off.

NEGRO CHAMPIONS, 1948

WORLD—Homestead Grays, Washington

NATIONAL LEAGUE—Homestead Grays

AMERICAN LEAGUE—Black Barons, Birmingham

Longest Game in the Majors

The 26-inning 1-1 tie game between Brooklyn and Boston of the National League, played at Braves Field, Boston, on May 1, 1920, still stands as the longest contest in major league history. Both pitchers, Joe Oeschger of the Braves and Leon Cadore of the Robins, as they were then called because they were managed by Wilbert Robinson, went the distance. George (Miracle Man) Stallings guided Boston. The game was called because of darkness.

THE BOX SCORE

BROOKLYN (N)										BOSTON (N)									
ab. r. h. po. a. e.										ab. r. h. po. a. e.									
Olson, 2b	10	0	1	6	9	1				Powell, cf	7	0	1	8	0				
Neis, rf	10	0	1	9	0	0				Pick, 2b	11	0	0	5	0				
Johnston, 3b	10	0	2	3	1	0				Mann, lf	10	0	2	6	0				
Wheat, lf	9	0	2	3	0	0				Cruise, rf	9	1	1	4	0				
Myers, cf	2	0	1	2	0	0				Holke, lb	10	0	2	43	1				
Hood, cf	6	0	1	8	1	0				Boeckel, 3b	11	0	3	1	7	0			
Konetchy, lb	9	0	1	30	1	0				Maranville, ss	10	0	3	1	9	0			
Ward, ss	10	0	0	5	3	0				O'Neill, c	2	0	0	4	3	0			
Krueger, c	2	1	0	4	3	1				aChristenbury	1	0	1	0	0	0			
Elliott, e	7	0	0	7	3	0				Gowdy, e	6	0	1	6	1	0			
Cadore, p	10	0	0	1	13	0				Oeschger, p	9	0	1	0	11	0			

Totals . . . 85 | 9 78 34 2

Totals . . . 86 | 15 78 42 2

aBatted for O'Neill in the ninth.

Brooklyn . . . 000 010 000 000 000 000 000 000 00—1
Boston . . . 000 001 000 000 000 000 000 000 00—1

Two-base hits—Maranville, Oeschger. Three-base hit—Cruise. Stolen base—Myers. Sacrifice hits—Hood, Oeschger, Powell, O'Neill, Holke. Cruise. Double play—Olson and Konetchy. Bases on balls—Off Cadore 5, Oeschger 3. Struck out—By Cadore 8, Oeschger 4. Wild pitch—Oeschger. Umpires—McCormick and Hart. Time of game—3 hours 50 minutes. Attendance—2,000.

TRACK AND FIELD

RUNNING, jumping, hurdling and throwing weights—track and field sports, in other words—are as natural to boys and young men as eating, drinking and breathing. Unorganized competition in this form of sport goes back beyond the Cave Man era. Organized competition begins with the first recorded Olympic Games in Greece, 776 B. C., when Coroebus of Elis won the only event on the program, a race of approximately 200 yards. The Olympic Games, with an ever-widening program of events, continued until "the glory that was Greece" had faded and "the grandeur that was Rome" was tarnished, and finally were abolished by decree of Emperor Theodosius I of Rome in A. D. 394. The Tailteann Games of Ireland are supposed to have antedated the first Olympic Games by some centuries, but we have no records of the specific events and winners thereof.

Professional contests of speed and strength were popular at all times and in many lands, but the widespread competition of amateur athletes in track and field

sports is a comparatively modern development. The first organized amateur athletic meet of record was sponsored by the Royal Military Academy at Woolwich, England, in 1849. Oxford and Cambridge track and field rivalry began in 1864 and the English amateur championships were established in 1866. In the United States such organizations as the New York Athletic Club and the Olympic Club of San Francisco conducted track and field meets in the 1870's, and a few colleges joined to sponsor a meet in 1874. The success of the college meet led to the formation of the Intercollegiate Association of Amateur Athletes of America and the holding of an annual set of championship games beginning in 1876.

Many athletic clubs joined the National Association of Amateur Athletes of America, formed in 1879, but dissension broke up this organization and the Amateur Athletic Union, organized in 1888, has been the ruling body in American amateur athletics since that time.

Track and Field Statistics

Source: *Official A.A.U. Track and Field Rules and Records Book*. Reprinted by courtesy of the publishers, the Amateur Athletic Union of the United States, 233 Broadway, New York, N. Y.

MEN'S WORLD RECORDS

Recognized by the International Amateur Athletic Federation, October, 1947

RUNNING					
Event	Record	Holder	Home country	Where made	Date
100 yd.	9.4s.	Frank Wykoff	United States	Los Angeles, Calif.	May 10, 1930
		D. J. Joubert	South Africa	Grahamstown, So. Africa	1931
		Jesse Owens	United States	Ann Arbor, Mich.	May 25, 1935
		Clyde Jeffrey	United States	Long Beach, Calif.	Mar. 16, 1940
		Melvin E. Patton	United States	Modesto, Calif.	May 24, 1947
220 yd.	20.3s.	Jesse Owens	United States	Ann Arbor, Mich.	May 25, 1935
		Jesse Owens	United States	Chicago, Ill.	June 20, 1936
		Herbert McKenley	Jamaica, B.W.I.	Berkeley, Calif.	June 28, 1947
440 yd.	46.3s.	Sydney C. Wooderson	Gt. Britain	London, England	Aug. 20, 1938
880 yd.	1m.49.2s.	Gunder Hagg	Sweden	Malmo	July 17, 1945
1 mi.	4m.01.4s.	Gunder Hagg	Sweden	Stockholm	Aug. 4, 1944
2 mi.	8m.42.8s.	Gunder Hagg	Sweden	Göteborg	Sept. 20, 1942
3 mi.	13m.32.4s.	Viljo Heino	Finland	Helsinki	Aug. 25, 1944
6 mi.	28m.38.6s.	Viljo Heino	Finland	Helsinki	Sept. 14, 1946
10 mi.	49m.22.2s.	Mikko Hietanen	Finland	Kuopio	Aug. 20, 1947
15 mi.	1h.18m.48s.	Viljo Heino	Finland	Turku	Sept. 30, 1945
1 hr.	12mi.29yd.				

WALKING					
Event	Record	Holder	Home country	Where made	Date
2 mi.	13m.	Werner Hardmo	Sweden	Malmo	July 17, 1944
7 mi.	48m.53.6s.	Werner Hardmo	Sweden	Orebro	Oct. 1, 1944
10 mi.	1h.10m.55s.	John Mikaelsson	Sweden	Stockholm	Aug. 23, 1945
20 mi.	2h.41m.7s.	H. Olsson	Sweden	Boras	Aug. 15, 1943
30 mi.	4h.24m.54.2s.	F. Cornet	France	Paris	Oct. 11, 1942
1 hr.	8mi.1025yd.	John Mikaelsson	Sweden	Stockholm	Sept. 1, 1945
2 hr.	15mi.1521yd.	Olle Anderson	Sweden	Stockholm	Sept. 15, 1945

RUNNING—METRIC DISTANCES

Event	Record	Holder	Home country	Where made	Date
100 m.	10.2s	Jesse Owens	United States	Chicago, Ill.	June 20, 1936
		Harold Davis	United States	Compton, Calif.	June 6, 1941
200 m.	20.3s	Jesse Owens	United States	Ann Arbor, Mich.	May 25, 1935
400 m.	46s	Rudolf Harbig	Germany	Frankfurt	Aug. 12, 1939
		Grover Klemmer	United States	Philadelphia, Pa.	June 29, 1941
800 m.	1m.46.6s	Rudolf Harbig	Germany	Milan	July 15, 1939
1,000 m.	2m.21.4s	O. Rune Gustafsson	Sweden	Boras, Sweden	Sept. 4, 1946
1,500 m.	3m.43s	Gunder Hagg	Sweden	Gothenburg	July 7, 1944
2,000 m.	5m.11.8s	Gunder Hagg	Sweden	Stockholm	Aug. 23, 1942
3,000 m.	8m.1.2s	Gunder Hagg	Sweden	Stockholm	Aug. 28, 1942
5,000 m.	13m.58.2s	Gunder Hagg	Sweden	Gothenburg	Sept. 20, 1942
10,000 m.	29m.35.4s	Viljo Heino	Finland	Helsinki	Aug. 25, 1944
20,000 m.	1h.3m.1.2s	Andras Csaplar	Hungary	Budapest	Oct. 26, 1941
25,000 m.	1h.21m.27s	Erkki Tamila	Finland	Joensuu	Sept. 3, 1939
30,000 m.	1h.40m.57.6s	José Ribas	Argentina	Buenos Aires	May 27, 1932
1 h.	19,329 m.	Viljo Heino	Finland	Helsinki	Aug. 25, 1944

WALKING—METRIC DISTANCES

Event	Record	Holder	Home country	Where made	Date
3,000 m.	11m.51.8s	Werner Hardmo	Sweden	Malmö	Sept. 1, 1945
5,000 m.	20m.26.8s	Werner Hardmo	Sweden	Kumla	July 31, 1945
10,000 m.	42m.39.6s	Werner Hardmo	Sweden	Kumla	Sept. 9, 1945
20,000 m.	1h.32m.28.4s	John Mikaelsson	Sweden	Vaxjö	July 12, 1942
30,000 m.	2h.28m.57.4s	H. Olsson	Sweden	Boras	Aug. 15, 1943
50,000 m.	4h.34m.3s	Paul Sievert	Germany	Munich	Oct. 5, 1924
1 hr.	13,812 m.	John Mikaelsson	Sweden	Stockholm	Sept. 1, 1945
2 hr.	25,531 m.	Olle Anderson	Sweden	Stockholm	Sept. 15, 1945

HURDLES (10 hurdles)

Event	Record	Holder	Home country	Where made	Date
120 yd.	13.7s	Forrest G. Towns	United States	Oslo, Norway	Aug. 27, 1936
		Fred Wolcott	United States	Philadelphia, Pa.	June 29, 1941
220 yd.	22.5s	Fred Wolcott	United States	Princeton, N. J.	June 8, 1940
		Harrison Dillard	United States	Delaware, Ohio	June 8, 1946
440 yd.	52.2s	R. Cochrane	United States	Des Moines, Iowa	Apr. 25, 1942
110 m.	13.7s	Forrest G. Towns	United States	Oslo, Norway	Aug. 27, 1936
		Fred Wolcott	United States	Philadelphia, Pa.	June 29, 1941
200 m.	22.3s	Fred Wolcott	United States	Princeton, N. J.	June 8, 1940
400 m.	50.6s	Glenn Hardin	United States	Stockholm	July 26, 1934

RELAY RACES

Event	Record	Holder	Home country	Where made	Date
440 yd. (4x110)	40.5s	Univ. of So. California	United States	Fresno, Calif.	May 14, 1938
		(L. LaFond, W. C. Andersson, P. Jordan, A. Talley)			
880 yd. (4x220)	1m.25s	Stanford Univ.	United States	Fresno, Calif.	May 15, 1937
		(Kneubuhl, Hiserman, Malott, Weiershauser)			
1 mi. (4x440)	3m.9.4s	Univ. of California	United States	Los Angeles	June 17, 1941
		(John Reese, F. A. Froom, C. F. Barnes, Grover Klemmer)			
2 mi. (4x880)	7m.34.6s	Univ. of California	United States	Los Angeles	May 24, 1941
		(John Reese, Grover Klemmer, Dick Peter, Clarence Barnes)			
4 mi. (4x1mile)	17m.2.8s	Brandkarens Idrottsklub	Sweden	Stockholm	Aug. 15, 1941
		Stockholm (Ake Jansson, Hugo Karlen, Henry Kalarne, Bror Hellstrom)			

RELAY RACES—METRIC DISTANCES

Event	Record	Holder	Home country	Where made	Date
400 m. (4x100)	39.8s	U. S. A. National Team	United States	Berlin	Aug. 9, 1936
		(Owens, Metcalfe, Draper, Wykoff)			
800 m. (4x200)	1m.25s	Stanford Univ.	United States	Fresno, Calif.	May 15, 1937
		(Kneubuhl, Hiserman, Malott, Weiershauser)			
1600 m. (4x400)	3m.8.2s	U. S. A. National Team	United States	Los Angeles	Aug. 7, 1932
		(Fuqua, Ablowich, Warner, Carr)			
3,200 m. (4x800)	7m.29s	Swedish National Team	Sweden	Stockholm	Sept. 13, 1946
		(T. Sten, O. Linder, S. Lindgard, Lennart Strand)			
6,000 m. (4x1500)	15m.38.6s	Malmö Allm. IF	Sweden	Norrokoping	July 29, 1945
		(Jakobson, Stridsberg, Strand, Hagg)			

DECATHLON

7,900 points	Glenn Morris	United States	Berlin	Aug. 7-8, 1936
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FIELD EVENTS

Event	Record	Holder	Home country	Where made	Date
High jump	6ft.11in.(2.11m.)	Les Steers	United States	Los Angeles	June 17, 1941
Running broad jump	26ft.8¼in.(8.13m.)	Jesse Owens	United States	Ann Arbor	May 25, 1935
Rng. hop, step, jump	52ft.5¼in.(16m.)	Naoto Tajima	Japan	Berlin	Aug. 6, 1936
Pole vault	15ft.7¼in.(4.77m.)	C. Warmerdam	United States	Modesto, Calif.	May 23, 1942
16-lb. shot-put	57ft.1in.(17.40m.)	Jack Torrance	United States	Oslo	Aug. 5, 1934
Discus throw	180ft.2¼in.(54.93m.)	Robert Fitch	United States	Minneapolis	June 8, 1946
Javelin throw	258ft.2¼in.(78.70m.)	Yrjö Nikkanen	Finland	Kotka	Oct. 16, 1938
16-lb. hammer throw	193ft.6¼in.(59m.)	Erwin Blask	Germany	Stockholm	Aug. 27, 1938

WOMEN'S WORLD RECORDS

Recognized by the International Amateur Athletic Federation, October, 1947

RUNNING

Event	Record	Holder	Home country	Where made	Date
100 yd.	10.8s.	F. E. Blankers-Koen	Netherlands	Amsterdam	May 18, 1944
220 yd.	24.3s.	Stella Walasiewicz	Poland	Cleveland, Ohio	June 9, 1935
880 yd.	2m.19.7s.	Olive Mary Hall	Great Britain	Mitcham, Eng.	Aug. 27, 1938
60 m.	7.3s.	Stella Walasiewicz	Poland	Lemberg, Pol.	Sept. 24, 1933
100 m.	11.5s.	Helen Stephens	United States	Berlin	Aug. 4, 1936
200 m.	23.6s.	Stella Walasiewicz	Poland	Warsaw	Aug. 15, 1935
800 m.	2m.13.8s.	Anna Larsson	Sweden	Stockholm	Aug. 30, 1945

RELAY RACES

440 yd. (4x110)	48.8s.	National Team (Blankers-Koen, Adema, Timmer, Koudys)	Netherlands	Amsterdam	May 18, 1944
400 m. (4x100)	46.4s.	National Team (Albus, Krauss, Dollinger, Dörfeldt)	Germany	Berlin	Aug. 8, 1936
800 m. (4x200)	1m.41s.	National Team (Sluyters, Blankers-Koen, Timmer, Koudys)	Netherlands	Hilversum, Neth.	Aug. 27, 1944
2,400 m. (3x800)	7m.15.8s.	National Team (Delepine, Loubet, Dufour)	France	Paris	Oct. 3, 1943

HURDLES

80 m.	11.3s.	Claudia Testoni	Italy	Garmisch-Partenkirchen, Germany	July 23, 1939
		Claudia Testoni	Italy	Drasden, Ger.	Aug. 13, 1939
		F. E. Blankers-Koen	Netherlands	Amsterdam	Sept. 20, 1942

FIELD EVENTS

Rng. high jump	1.71m. (5 ft. 7¼ in.)	F. E. Blankers-Koen	Netherlands	Amsterdam	May 30, 1943
Broad jump	6.25m. (20 ft. 6 in.)	F. E. Blankers-Koen	Netherlands	Leiden, Neth.	Sept. 19, 1943
Shot-put	14.38m. (47 ft. 2½ in.)	Gisela Mauermayer	Germany	Warsaw	July 15, 1934
Discus throw	48.31m. (158 ft. 6 in.)	Gisela Mauermayer	Germany	Dresden	July 11, 1936
Javelin throw	47.24m. (154 ft. 11½ in.)	Anneliese Steinheuer	Germany	Frankfurt	June 21, 1942

PENTATHLON

418 points	Gisela Mauermayer	Germany	Stuttgart	July 16-17, 1938
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WINNERS OF FINAL U. S. 1948 OLYMPIC TRYOUTS

(At Evanston, Ill., July 9-10)

100 M.—Barney Ewell, Lancaster, Pa.	10.2s.	HIGH JUMP—Verne McGrew, Rice	6 ft. 8¼ in.
200 M.—Mel Patton, Southern California	20.7s.	DISCUS—Fortune Gordien, Minnesota	166 ft. 2 in.
400 M.—Mal Whitfield, Ohio State	46.6s.	HAMMER—Robert Bennett, Apponaug, R. I.	177 ft. 8½ in.
800 M.—Mal Whitfield	1m.50.6s.	HOP, STEP, AND JUMP—William Albens, Elizabeth, N. J., and Erik Koutonen, Fitchburg, Mass.	
1,500 M.—Donald Gehrmann, Wisconsin	3m.52.2s.	(tie)	48 ft. 11½ in.
5,000 M.—Curtis C. Stone, Philadelphia	14m.40.7s.	JAVELIN—Martin Biles, San Francisco Olympic Club	225 ft. 9 in.
3,000 M. STEEPLECHASE—Robert McMillen, Los Angeles A.C.	9m.18.7s.	POLE VAULT—A. Richmond Morcom, Durham, N. H.	14 ft. 8½ in.
110-M. HURDLES—William Porter, Northwestern	13.9s.	SHOT-PUT—Francis Delaney, San Francisco Olympic Club	55 ft. 1¾ in.
400-M. HURDLES—Roy Cochran, Los Angeles A.C.	51.7s.		
BROAD JUMP—Willie Steele, San Diego State	26 ft. 2 in.		

History of the Mile Run

Year	Athlete and country	Where made	Time
1865	Webster, England	England	4:44.3
1866	C. B. Lawes, England	England	4:39
1868	W. M. Chinnery, England	England	4:33.2
1871	W. M. Chinnery, England	England	4:31.8
1874	Walter Slade, England	England	4:24.5
1881	Walter George, England	England	4:19.8
1884	Walter George, England	England	4:18.4
1895	F. E. Bacon, England	England	4:17
1895	T. P. Conneff, United States	United States	4:15.6
1911	John Paul Jones, United States	United States	4:15.4
1913	John Paul Jones, United States	United States	4:14.4
1915	Norman Taber, United States	United States	4:12.6
1923	Paavo Nurmi, Finland	Sweden	4:10.4
1931	Jules Ladoumegue, France	France	4:09.2
1933	John Lovelock, New Zealand	United States	4:07.6
1934	Glenn Cunningham, United States	United States	4:06.8
1937	Sydney Wooderson, England	England	4:06.4
1942	Gunder Hagg, Sweden	Sweden	4:06.2
1942	Gunder Hagg, Sweden	Sweden	4:04.6
1943	Arne Andersson, Sweden	Sweden	4:02.6
1944	Arne Andersson, Sweden	Sweden	4:01.6
1945	*Gunder Hagg, Sweden	Sweden	4:01.4

*In March 1946, Hagg and Andersson were declared professionals by the Swedish Athletic Association and barred from amateur competition for life.

James E. Sullivan Memorial Award Winners

Given annually to the amateur athlete voted by sports leaders as having done the most to advance the cause of sportsmanship.

Year	Winner	From	Sport
1930	Robert T. Jones, Jr.	Atlanta, Ga.	Golf
1931	Bernard E. Berlinger	Philadelphia	All-around athletics
1932	James A. Bausch	Kansas City, Mo.	All-around athletics
1933	Glenn Cunningham	University of Kansas	Middle-distance running
1934	William R. Bonthron	New York A. C.	Middle-distance running
1935	W. Lawson Little, Jr.	California	Golf
1936	Glenn Morris	Denver A. C.	All-around athletics
1937	J. Donald Budge	Oakland, Calif.	Tennis
1938	Donald R. Lash	Indiana State Police	Distance running
1939	Joseph W. Burk	Penn. A. C., Philadelphia	Rowing
1940	J. Gregory Rice	South Bend A. A., Ind.	Distance running
1941	Leslie MacMitchell	New York University	Middle-distance running
1942	Cornelius Warmerdam	San Francisco Olympic Club	Pole vaulting
1943	Gilbert L. Dodds	Boston Athletic Ass'n	Middle-distance running
1944	Ann Curtis	Crystal Plunge S. C., San Francisco	Swimming
1945	Felix (Doc) Blanchard	U. S. Military Academy	Football
1946	Y. Arnold Tucker	U. S. Military Academy	Football
1947	John B. Kelly, Jr.	Philadelphia	Rowing

I. C. A. A. A. TRACK AND FIELD CHAMPIONS, 1948

Outdoor

100 YD.—Paul Cowie, Princeton
 220 YD.—Paul Cowie
 440 YD.—Reginald Pearman, New York U.
 880 YD.—Jack Dianetti, Michigan State
 MILE—Gerald Karver, Penn State
 2 MILES—Horace Ashenfelter, Penn State
 MILE RELAY—Seton Hall
 120-YD. HIGH HURDLES—Paige Christiansen, Michigan State
 220-YD. LOW HURDLES—Jeffrey Kirk, Pennsylvania
 BROAD JUMP—Fred Johnson, Michigan State
 HIGH JUMP—Irving Mondschein, New York U.
 DISCUS—Victor Frank, Yale
 HAMMER—Samuel H. Felton, Jr., Harvard
 JAVELIN—Richard Gelb, Yale
 POLE VAULT—John Eustis, Yale, and Arthur Sherman, Rhode Island State (tie)
 SHOT-PUT—Stanley Lampert, New York U.
 TEAM—Yale

Indoor

60 YD.—Joseph Cianciabella, Manhattan
 60-YD. HIGH HURDLES—George Cook, Yale
 600 YD.—Joseph Hall, Rhode Island State
 1,000 YD.—Reginald Pearman, New York U.
 MILE—Gerald Karver, Penn State
 2 MILES—Horace Ashenfelter, Penn State
 MILE RELAY—Yale
 2-MILE RELAY—Manhattan
 BROAD JUMP—Herbert Douglas, Pittsburgh
 HIGH JUMP—William Vessie, Columbia, and Irving Mondschein, New York U. (tie)
 POLE VAULT—Roy Potochnik, Marquette
 SHOT-PUT—James Fuchs, Yale
 35-LB. WEIGHT—George Marsanskis, Maine
 TEAM—New York University

NATIONAL A. A. U. TRACK AND FIELD CHAMPIONS, 1948

Outdoor

100 M.—Barney Ewell, Lancaster, Pa.
 200 M.—Lloyd La Beach, Los Angeles A. C.
 400 M.—Herb McKenley, Shore A. C., Elberon, N. J.
 800 M.—Herbert Barten, University of Michigan
 1,500 M.—Gilbert Dodds, Boston A. A.
 5,000 M.—Curtis Stone, Shanahan Catholic Club, Philadelphia
 10,000 M.—Edward O'Toole, New York A. C.
 110-M. HIGH HURDLES—William Porter, Northwestern U.
 200-M. HURDLES—Madill Gartiser, University of Missouri
 400-M. HURDLES—Roy Cochran, Los Angeles A. C.
 3,000-M. STEEPLECHASE—Forest Efav, Stillwater, Okla.
 3,000-M. WALK—Henry H. Laskau, Maccabi A. C., New York
 BROAD JUMP—Fred Johnson, Michigan State College
 HIGH JUMP—Tom Scofield, University of Kansas, and William A. Vessie, New York A. C. (tie)
 DISCUS—Fortune Gordien, University of Minnesota
 56-LB. WEIGHT—Henry Dreyer, New York A. C.
 HAMMER—Robert Bennett, Rhode Island Track and Field Officials A. A., Providence
 HOP, STEP, AND JUMP—Gaylord Bryan, Stanford U.
 JAVELIN—Stephen Seymour, Los Angeles A. C.
 POLE VAULT—A. Richmond Morecom, New Hampshire State A. A., and Robert Richards, Illinois A. C., Chicago (tie)
 SHOT-PUT—Francis Delaney, Olympic Club, San Francisco
 TEAM—New York A. C.
 DECATHLON—Robert Mathias, Tulare, Calif.
 PENTATHLON—Russell Thomas, Jeannette, Pa.
 MARATHON—Johnny Kelley, West Acton, Mass.

GYMNASTICS

National A.A.U. Champions, 1948

ALL-AROUND—Edward Scrobe, D. A. Turn Verein, New York
 CALISTHENICS—Robert Stout, Temple University
 FLYING RINGS—J. William Buffa, West Side Y. M. C. A., New York
 HORIZONTAL BAR—Frank Cumiskey, Swiss Gym. Society, Union City, N. J.
 INDIAN CLUBS—George R. Hearn, Springfield College
 LONG HORSE—Joseph Kotys, Cleveland Swiss Turners
 PARALLEL BARS—Joseph Kotys
 ROPE CLIMB—Don Perry, Venice (Calif.) Community Club
 SIDE HORSE—J. Stephen Greene, Penn State
 TRAMPOLINE—Robert Schoendube, U. of Michigan
 TUMBLING—Irvin E. Bedard, U. of Illinois
 TEAM—Penn State College

WOMEN

ALL-AROUND—Helen Schifano, Elizabeth (N. J.) Turners
 BALANCE BEAMS—Clara Schroth, Philadelphia Turners
 CALISTHENICS—Clara Schroth
 FLYING RINGS—Clara Schroth
 INDIAN CLUBS—Margaret Dutcher, Ridgewood, N. J.
 PARALLEL BARS—Helen Schifano
 SIDE HORSE VAULT—Clara Schroth
 TUMBLING—Joann Matthews, Dallas A. C.
 TEAM DRILL—Philadelphia Turners

WRESTLING

National A.A.U. Champions, 1948

114.5 LB.—Ensign Malcolm MacDonald, U. S. Navy
 125.5 LB.—Lieut. Robert Kitt, U. S. Navy
 136.5 LB.—Leo Thomsen, Cornell (Iowa) College
 147.5 LB.—Newt Copple, University of Nebraska
 160.5 LB.—Leland Merrill, New York A. C.
 174 LB.—Dale Thomas, Marion, Iowa
 191 LB.—Henry Wittenberg, New York Police Department
 HEAVYWEIGHT—Ray Gunkel, Purdue University
 TEAM—United States Navy

Indoor

60 YD.—Bill Mathis, Urbana, Ill.
 60 YD. HIGH HURDLES—Harrison Dillard, Baldwin-Wallace
 600 YD.—Dave Bolen, Boulder, Colo.
 1,000 YD.—Phil Thigpen, Seton Hall College
 MILE RUN—Tommy Quinn, New York A. C.
 MILE WALK—Henry Laskau, Maccabi A. C., New York
 MILE RELAY—Seton Hall College
 2-MILE RELAY—Manhattan College
 3-MILE RUN—Curtis Stone, Shanahan C. C., Philadelphia
 SPRINT MEDLEY RELAY—Pioneer Club, New York
 BROAD JUMP—Lorenzo Wright, Wayne University
 HIGH JUMP—John Vislosky, New York A. C.
 POLE VAULT—Robert Richards, Illinois A. C., Chicago
 SHOT-PUT—Norman Wasser, University of Illinois
 35-LB. WEIGHT—Robert Bennett, Rhode Island Track and Field Officials A. A., Providence
 TEAM—New York Athletic Club

Outdoor—Women

50 M.—Mabel Walker, Tuskegee.
 100 M.—Stella Walsh, Polish Women's A.C., Cleveland.
 200 M.—Stella Walsh.
 80-M. HURDLES—Bernice Robinson, Washington Park, Chicago.
 400-M. RELAY—Tuskegee Institute A team.
 BROAD JUMP—Stella Walsh.
 HIGH JUMP—Alice Coachman, Albany (Ga.) State.
 BASEBALL THROW—Juanita Watson, Tuskegee.
 DISCUS—Frances Kaszubski, North Olmstead-Westlake A.C., Cleveland.
 JAVELIN—Dorothy Dodson, Hurricanes, Chicago.
 SHOT-PUT—Frances Kaszubski.
 TEAM—Tuskegee Institute.

NATIONAL ROWING CHAMPIONS, 1948

SINGLE SCULLS—John B. Kelly, Jr., Vesper B. C., Philadelphia.
 ASSOCIATION SINGLE SCULLS—John Trinsey, Vesper B. C.
 QUARTER-MILE SINGLE SCULLS—John Trinsey
 DOUBLE SCULLS—Joseph Angyal, New York A. C.—Arthur Gallagher, Penn A. C., Philadelphia
 QUADRUPLE SCULLS—Vesper B. C., Philadelphia
 PAIR-OARED SHELL WITH COXSWAIN—Vesper B. C.
 PAIR-OARED SHELL WITHOUT COXSWAIN—Yale University
 4-OARED SHELL WITH COXSWAIN—University of Washington
 4-OARED SHELL WITHOUT COXSWAIN—Yale University
 8-OARED SHELL—University of California
 INTERMEDIATE 8-OARED SHELL—Detroit B. C.
 145-LB. SINGLE SCULLS—Joseph Angyal
 145-LB. QUARTER-MILE SINGLE SCULLS—Tom McCreesh, Penn A. C.
 145-LB. DOUBLE SCULLS—Undine Barge Club, Philadelphia
 145-LB. QUADRUPLE SCULLS—Undine B. C.
 145-LB. 4-OARED SHELL WITH COXSWAIN—Fairmount R. A., Philadelphia
 145-LB. 8-OARED SHELL—West Side R. C., Buffalo
 TEAM (BARNES TROPHY)—Vesper Boat Club

British Henley

DIAMOND SCULLS—Merwyn Wood, Australia
 THAMES CHALLENGE CUP—Princeton 150-lb. crew

Illinois A. C. Water Polo Victor

The Illinois Athletic Club of Chicago won the 1948 National A. A. U. indoor water polo championship.

THE OLYMPIC GAMES

(W)—Site of Winter games. (S)—Site of Summer games.

1896—Athens	1912—Stockholm	1928—Amsterdam (S)	1948—St. Moritz (W)
1900—Paris	1920—Antwerp	1932—Lake Placid (W)	1948—London (S)
1904—St. Louis	1924—Chamonix (W)	1932—Los Angeles (S)	1952—Scheduled for Oslo
1906—Athens	1924—Paris (S)	1936—Garmisch-Partenkirchen (W)	(W) and Helsinki (S)
1908—London	1928—St. Moritz (W)	1936—Berlin (S)	

THE first Olympic Games of which there is record occurred in 776 B. C. and consisted of one event, a great foot race of about 200 yards held on a plain by the River Alpheus (now the Ruphia) just outside the little town of Olympia in Greece. It was from that date that the Greeks began to keep their calendar by "Olympiads," the four-year spans between the celebrations of the famous games. There was a religious as well as an athletic significance to the ancient games and the shrines, temples and sacred fires within the Olympic enclosure were the scenes of worship all through the year whereas the Olympic Games, at the height of their popularity, never lasted more than five days and were held only once every four years.

The competition was entirely amateur at the start and the only prizes were laurel wreaths. Only free Greek citizens were allowed to compete and they had to undergo a strict training course that lasted ten months. But civic rivalry led to trickery and professionalism and the

games became degraded after some centuries. When Rome conquered Greece, the Roman emperors turned the Olympic Games from patriotic, religious and athletic festivals into carnivals and circuses. They dragged on malodorously until they were finally halted by decree of Emperor Theodosius I of Rome in A. D. 394.

The modern Olympic Games, which started in Athens in 1896, are the result of the devotion of a French educator, Baron Pierre de Coubertin, to the idea that, since boys and athletics have gone together down the ages, education and athletics might well go hand-in-hand toward a better international understanding. He planned a revival of the ancient Olympic Games on a world-wide basis and succeeded in getting nine nations to send athletes to the first of the modern games in 1896. Since then more than 29,000 athletes representing 58 nations have competed in the games.

Interrupted for the second time by war, the modern Olympic Games were resumed at London in 1948.

1948 OLYMPIC CHAMPIONS

TRACK AND FIELD—MEN

100 M.—Harrison Dillard, United States.....	10.3s.
200 M.—Mel Patton, United States.....	21.1s.
400 M.—Arthur Wint, Jamaica, B. W. I.....	46.2s.
800 M.—Malvin Whitfield, United States.....	1m.49.2s.
1,500 M.—Henri Eriksson, Sweden.....	3m.49.8s.
5,000 M.—Gaston Reiff, Belgium.....	14m.17.6s.
10,000 M.—Emil Zatopek, Czechoslovakia.....	29m.59.6s.
MARATHON—Delfo Cabrera, Argentina.....	2h.34m.51.6s.
400-M. RELAY—United States (Barney Ewell, Lorenzo Wright, Harrison Dillard, Mel Patton).....	40.3s.
1,600-M. RELAY—United States (Arthur Harnden, Cliff Bourland and Roy Cochran, Malvin Whitfield)....	3m.10.4s.
110-M. HURDLES—William Porter, United States.....	13.9s.
400-M. HURDLES—Roy Cochran, United States.....	51.1s.
3,000-M. STEEPLECHASE—Thure Sjostrand, Sweden.....	9m.4.6s.
10,000-M. WALK—John Mikaelsson, Sweden.....	45m.13.2s.
50,000-M. WALK—John Lundgren, Sweden.....	4h.41m.52s.
BROAD JUMP—Willie Steele, United States.....	25 ft. 8 in.
HIGH JUMP—John Winter, Australia.....	6 ft. 6 in.
DISCUS—Adolfo Consolini, Italy.....	173 ft. 2 in.
HAMMER—Irmay Nemeth, Hungary.....	183 ft. 11½ in.
HOP, STEP, AND JUMP—Arne Ahman, Sweden.....	50 ft. 6¼ in.
JAVELIN—Kaj Rautavaara, Finland.....	228 ft. 10½ in.
POLE VAULT—Guinn Smith, United States.....	14 ft. 1¼ in.
SHOT-PUT—Wilbur Thompson, United States.....	56 ft. 2 in.
DECATHLON—Robert Mathias, United States.....	7,139 pts.

TRACK AND FIELD—WOMEN

100 M.—Mrs. Fanny Blankers-Koen, The Netherlands..	11.9s.
200 M.—Mrs. Fanny Blankers-Koen.....	24.4s.
80-M. HURDLES—Mrs. Fanny Blankers-Koen.....	11.2s.
400-M. RELAY—The Netherlands (X. Stad de Jong, J. J. M. Witziers-Timmer, G. J. M. Van der Kade, Fanny Blankers-Koen).....	47.5s.
BROAD JUMP—V. O. Gyarmatt, Hungary.....	18 ft. 8¼ in.
HIGH JUMP—Alice Coachman, United States (Albany, Ga.).....	5 ft. 6½ in.
DISCUS—Micheline Ostermeyer, France.....	137 ft. 6½ in.
JAVELIN—H. Baume, Austria.....	149 ft. 6 in.
SHOT-PUT—Micheline Ostermeyer.....	45 ft. 1½ in.

SWIMMING—MEN

100-M. FREE STYLE—Walter Ris, United States (University of Iowa).....	57.3s.
400-M. FREE STYLE—Bill Smith, United States (Ohio State).....	4m.41s.
1,500-M. FREE STYLE—James McLane, United States (Akron, Ohio).....	19m.18.5s.
100-M. BACKSTROKE—Allen Stack, United States (Yale).....	1m.6.4s.
200-M. BREAST STROKE—Joe Verdeur, United States (LaSalle College, Philadelphia).....	2m.39.3s.
800-M. RELAY—United States (Walter Ris, James McLane, Wally Wolf, Los Angeles; Bill Smith).....	8m.46s.
PLATFORM DIVING—Dr. Sammy Lee, United States (Pasadena, Calif.).....	130.05 pts.
SPRINGBOARD DIVING—Bruce Harlan, United States (Ohio State).....	163.64 pts.

SWIMMING—WOMEN

100-M. FREE STYLE—Greta Andersen, Denmark	1m.6.3s.
400-M. FREE STYLE—Ann Curtis, United States (San Francisco)	5m.17.8s.
100-M. BACKSTROKE—Karen Harup, Denmark	1m.14.4s.
200-M. BREAST STROKE—Nel van Vliet, The Netherlands	2m.57.2s.
400-M. RELAY—United States (Marie Corridon, Norwalk, Conn.; Thelma Kalama, Hawaii; Brenda Helser, Los Angeles; Ann Curtis)	4m.29.2s.
PLATFORM DIVING—Mrs. Victoria Manalo Draves, United States (Los Angeles)	68.87 pts.
SPRINGBOARD DIVING—Mrs. Victoria Manalo Draves	108.74 pts.

BOXING

FLYWEIGHT—Pascuel Perez, Argentina.	
BANTAMWEIGHT—Tibor Csik, Hungary.	
FEATHERWEIGHT—Ernesto Formenti, Italy.	
LIGHTWEIGHT—Gerry Dreyer, South Africa.	
WELTERWEIGHT—Julius Torma, Czechoslovakia.	
MIDDLEWEIGHT—Laszlo Pappy, Hungary.	
LIGHT HEAVYWEIGHT—George Hunter, South Africa.	
HEAVYWEIGHT—Rafael Iglesias, Argentina.	

WRESTLING**Free Style (Catch-As-Catch-Can)**

FLYWEIGHT—V. L. Viitala, Finland.	
BANTAMWEIGHT—Nassuh Akkar, Turkey.	
FEATHERWEIGHT—Gazanfer Bilge, Turkey.	
LIGHTWEIGHT—Celal Atik, Turkey.	
WELTERWEIGHT—Yasar Dogu, Turkey.	
MIDDLEWEIGHT—Glenn Brand, United States (Iowa State).	
LIGHT HEAVYWEIGHT—Henry Wittenberg, United States (New York).	
HEAVYWEIGHT—George Bobis, Hungary.	

Greco-Roman

FLYWEIGHT—Pietro Lombardi, Italy.	
BANTAMWEIGHT—K. A. Petersen, Sweden.	
FEATHERWEIGHT—M. Oktav, Turkey.	
LIGHTWEIGHT—K. G. H. Freij, Sweden.	
WELTERWEIGHT—E. G. Andersson, Sweden.	
MIDDLEWEIGHT—R. A. E. Gronberg, Sweden.	
LIGHT HEAVYWEIGHT—Karl Nilsson, Sweden.	
HEAVYWEIGHT—Armet Kirecci, Turkey.	

ROWING (1,900 METERS)

SINGLE SCULLS—Mervyn Wood, Australia	6m.51.3s.
DOUBLE SCULLS—Great Britain (B. H. T. Bushnell— R. D. Burnell)	6m.51.3s.
PAIRS WITH COXSWAIN—Denmark	8m.0.5s.
PAIRS WITHOUT COXSWAIN—Great Britain (W. G. R. M. Lawrie—J. H. T. Wilson)	7m.21.1s.
FOURS WITH COXSWAIN—United States (Univer- sity of Washington)	6m.58.8s.
FOURS WITHOUT COXSWAIN—Italy	6m.39s.
EIGHTS—United States (University of California)	6m.10.3s.

GYMNASTICS

Points

FREE STANDING EXERCISES—F. Pataki, Hungary	38.7
HORIZONTAL BARS—Josef Stalder, Switzerland	39.7
LONG-HORSE VAULT—P. J. Aaltonen, Finland	39.1
PARALLEL BARS—M. Reusch, Switzerland	39.5
POMMELE FLOOR—Tie among P. J. Aaltonen, V. A. Huhtanen, H. Savolainen, all of Finland	38.7
RINGS—K. Frei, Switzerland	39.6
TWELVE EXERCISES—V. A. Huhtanen, Finland	229.7
TEAM—Finland	1,358.3

Women

(No individual competition)

TEAM—Czechoslovakia	445.45
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CANOEING**Canadian Singles**

1,000 M.—Josef Holecek, Czechoslovakia	5m.42s.
10,000 M.—Frantisek Capek, Czechoslovakia	1h.2m.5.2s.

Canadian Pairs

1,000 M.—Czechoslovakia (Jan Brzak-Bohumil Kudra)	5m.7.1s.
10,000 M.—United States (Steve Lysak—Steve Macknowski, Yonkers, N. Y.)	55m.55.4s.

Kayak Singles

1,000 M.—Gert Fredriksson, Sweden	4m.33.2s.
10,000 M.—Gert Fredriksson	50m.47.7s.

Women

500 M.—Karan Hoff, Denmark	2m.31.9s.
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Kayak Pairs

1,000 M.—Sweden (Hans Berglund-Lennart Klingstroem)	4m.7.3s.
10,000 M.—Sweden (G. Akerlund-H. Wetterstroem)	46m.9.4s.

WEIGHT LIFTING

Pounds

BANTAMWEIGHT—Joseph De Pietro, United States (Paterson, N. J.)	677½
FEATHERWEIGHT—M. S. I. Fayad, Egypt	732½
LIGHTWEIGHT—I. Shams, Egypt	793½
MIDDLEWEIGHT—Frank Spellman, United States (York, Pa.)	859½
LIGHT HEAVYWEIGHT—Stanley Stanczyk, United States (York, Pa.)	920
HEAVYWEIGHT—John Davis, United States (Brooklyn)	997

CYCLING

1,000-M. SPRINT—Mario Ghella, Italy	
1,000-M. TIME TRIAL—J. Dupont, France	1m.13.5s.
2,000-M. TANDEM—Italy (F. Teruzzi-R. Perona)	3m.55.1s.
4,000-M. TEAM PURSUIT RACE—France	
121-MILE RACE—J. Beyaert, France	5h.18m.12.6s.
121-MILE TEAM RACE—Belgium	15h.58m.17.6s.

EQUESTRIAN**Individual**

DRESSAGE—Capt. H. Moeser, Switzerland	492½ pts.
THREE-DAY TEST—Capt. B. M. Chevallier, France	4 pts.
PRIX DES NATIONS—Col. H. Mariles Cortes, Mexico	6¼ faults

Team

DRESSAGE—Sweden	1,336 pts.
THREE-DAY TEST—United States	161½ minus pts.
PRIX DES NATIONS—Mexico	3¼ faults

FENCING**Individual**

FOIL—Jean Buhan, France	
EPEE—L. Cantone, France	
SABER—Aladar Gerevich, Hungary	
WOMEN'S FOIL—I. Elek, Hungary	

Team

FOIL—France	
EPEE—France	
SABER—Hungary	

MODERN PENTATHLON

Points

INDIVIDUAL—Capt. W. O. G. Grut, Sweden	16
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1948 Olympic Champions—(Cont.)

YACHTING

Class	Points
DRAGON—Norway.....	4,746
FIREFLY—Denmark.....	5,543
SIX-METER—United States (Llanoria, Herman F. Whiton, Jericho, N. Y., skipper).....	5,472
STAR—United States (Hilarus, Paul and Hilary Smart, Noroton, Conn.).....	5,828
SWALLOW—Great Britain.....	5,625

SHOOTING

	Points
25-M. AUTOMATIC PISTOL—K. Takacs, Hungary.....	600
50-M. FREE PISTOL—E. Vasquez Cam, Peru.....	545
50-M. SMALL-BORE RIFLE—Arthur E. Cook, United States (University of Maryland).....	599
300-M. FULL-BORE RIFLE—Emil Grunig, Switzerland.....	1,120

OTHER TEAM CHAMPIONS

BASKETBALL—United States
FIELD HOCKEY—India
SOCCER—Sweden
WATER POLO—Italy

MATHIAS' DECATHLON RECORD

Bob Mathias, 17, of Tulare, Calif., won the Olympic and United States decathlon championships in 1948. His performances in the two title events follow:

TRACK EVENTS

	Olympics		United States	
	Time	Points	Time	Points
100-METER DASH.....	0:11.2	787	0:11.2	787
400-METER RUN.....	0:51.7	780	0:51	818
1,500-METER RUN.....	5:11	354	4:55.7	443
110-METER HURDLES.....	0:15.7	818	0:15.1	912

FIELD EVENTS

	Dts- tance	Points	Dts- tance	Points
BROAD JUMP.....	21-8½	703	21-6½	693
HIGH JUMP.....	6-1½	859	6	822
DISCUS.....	144-4	834	139-7½	789
JAVELIN.....	165-1	593	157-3½	551
POLE VAULT.....	11-5½	692	11-6	696
SHOT-PUT.....	42-9½	719	42-6½	713

Total.....7,139 Total....7,224

Mathias won the discus and tied for first in the high jump and the pole vault at the Olympics; tied for first in the pole vault at the U. S. meet.

WINTER GAMES

SKIING

Men

	Time
18-KM. X-COUNTRY—Martin Lundstroem, Sweden.....	1:13:50
40-KM. RELAY—Sweden (Oestensson, Taepp, G. Eriksson, Lundstroem).....	2:32:08
50 KM.—Nils Karlsson, Sweden.....	3:47:48
SPECIAL SLALOM—Edi Reinalter, Switzerland.....	2:10.3
DOWNHILL—Henri Oreiller, France.....	2:55
SLALOM (Alpine)—James Couttet, France.....	2:14.9
	Points
JUMPING—Petter Hugsted, Norway.....	228.1
JUMPING (Nordic)—Sven Israelsson, Sweden.....	221.9
COMBINED JUMPING AND 18-KM. X-COUNTRY (Nordic)—Heikki Hasu, Finland.....	448.8
COMBINED DOWNHILL-SLALOM (Alpine)—Henri Oreiller, France.....	3.27

Women

	Time
SPECIAL SLALOM—Gretchen Fraser, United States.....	1:57.2
DOWNHILL—Hedy Schlunegger, Switzerland.....	2:28.6
SLALOM (Alpine)—Erika Mahringer, Austria.....	1:58.1
	Points
COMBINED DOWNHILL-SLALOM—Trude Beiser, Austria.....	6.58

Exhibition Events

	Time
MILITARY PATROL (27 km.)—Switzerland.....	2:34:25
	Points
PENTATHLON—Gustav Lindh, Sweden.....	14

FIGURE SKATING

	Points
MEN—Richard Button, United States.....	191.177
WOMEN—Barbara Ann Scott, Canada.....	163.077
PAIRS—Micheline Lannoy-Pierre Bagniet, Belgium.....	112.77

SPEED SKATING

	Time
500 METERS—Finn Helgesen, Norway.....	0:43.1
1,500 METERS—Sverre Farstad, Norway.....	2:17.6
5,000 METERS—Reidar Liaklev, Norway.....	8:29.4
10,000 METERS—Ake Seyffarth, Sweden.....	17:26.3

OTHER CHAMPIONS

	Time
SKELETON—Nino Bibbia, Italy.....	5:23.2
2-MAN BOBSLED—Switzerland (F. Endrich-F. Waller).....	5:29.2
4-MAN BOBSLED—United States (Francis Tyler, Pat Martin, Bill D'Amico, Lake Placid, N. Y., and Ed Rimkus, Schenectady, N. Y.).....	5:20.1
ICE HOCKEY—Canada.....	

UNOFFICIAL POINT SCORE OF 1948 SUMMER GAMES

(Associated Press compilation)

Based on 10 points for each first place, 5 for second, 4 for third, 3 for fourth, 2 for fifth and 1 for sixth.

Points		Points		Points		Points	
United States.....	662	Czechoslovakia.....	93	South Africa.....	35	Portugal.....	9
Sweden.....	353	Turkey.....	88	Jamaica.....	29	Panama.....	8
France.....	230½	Australia.....	85	Yugoslavia.....	17	Iran.....	6
Hungary.....	201½	Norway.....	65	Korea.....	15	Ceylon.....	5
Italy.....	183	Argentina.....	62½	Uruguay.....	15	Cuba.....	5
Great Britain.....	170	Belgium.....	58	Peru.....	13½	Trinidad.....	5
Finland.....	158	Mexico.....	41½	Spain.....	11½	Puerto Rico.....	4
Switzerland.....	151½	Austria.....	41	Poland.....	10	Pakistan.....	3
Denmark.....	143	Egypt.....	39	India.....	10	Philippines.....	1½
The Netherlands.....	119	Canada.....	35	Brazil.....	9	Chile.....	1

OLYMPIC GAMES CHAMPIONS, 1896-1936

Source: United States Olympic Association.

TRACK AND FIELD—MEN

60-Meter Run

1900 A. E. Kraenzlein, United States	7s.
1904 Archie Hahn, United States	7s.

100-Meter Run

1896 T. E. Burke, United States	12s.
1900 F. W. Jarvis, United States	10.8s.
1904 Archie Hahn, United States	11s.
1906 Archie Hahn, United States	11.2s.
1908 R. E. Walker, South Africa	10.8s.
1912 R. C. Craig, United States	10.8s.
1920 C. W. Paddock, United States	10.8s.
1924 H. M. Abrahams, Great Britain	10.6s.
1928 Percy Williams, Canada	10.8s.
1932 Eddie Tolan, United States	10.3s.
1936 Jesse Owens, United States	10.3s.*

*With the wind.

200-Meter Run

1900 J. W. B. Tewksbury, United States	22.2s.
1904 Archie Hahn, United States	21.6s.
1908 R. Kerr, Canada	22.4s.
1912 R. C. Craig, United States	21.7s.
1920 Allan Woodring, United States	22s.
1924 J. V. Scholz, United States	21.6s.
1928 Percy Williams, Canada	21.8s.
1932 Eddie Tolan, United States	21.2s.
1936 Jesse Owens, United States	20.7s.

400-Meter Run

1896 T. E. Burke, United States	54.2
1900 M. W. Long, United States	49.4
1904 H. L. Hillman, United States	49.2
1906 Paul Pilgrim, United States	53.2
1908 W. Halswelle, Great Britain (walkover)	50s.s
1912 C. D. Reidpath, United States	48.2s
1920 B. G. D. Rudd, South Africa	49.6s
1924 E. H. Liddell, Great Britain	47.6
1928 Ray Barbuti, United States	47.8s
1932 William Carr, United States	46.2s
1936 Archie Williams, United States	46.5s

800-Meter Run

1896 E. H. Flack, Great Britain	2m.11s.
1900 A. E. Tysoe, Great Britain	2m.1.4s.
1904 J. D. Lightbody, United States	1m.56s.
1906 Paul Pilgrim, United States	2m.1.2s.
1908 M. W. Sheppard, United States	1m.52.8s
1912 J. E. Meredith, United States	1m.51.9s
1920 A. G. Hill, Great Britain	1m.53.4s
1924 D. G. A. Lowe, Great Britain	1m.52.4s
1928 D. G. A. Lowe, Great Britain	1m.51.8s
1932 Thomas Hampson, Great Britain	1m.49.8s
1936 John Woodruff, United States	1m.52.9s

1,500-Meter Run

1896 E. H. Flack, Great Britain	4m.33.2s.
1900 C. Bennett, Great Britain	4m.6s.
1904 J. D. Lightbody, United States	4m.5.4s.
1906 J. D. Lightbody, United States	4m.12s.
1908 M. W. Sheppard, United States	4m.3.4s.
1912 A. N. S. Jackson, Great Britain	3m.56.8s.
1920 A. G. Hill, Great Britain	4m.1.8s.
1924 Paavo Nurmi, Finland	3m.53.6s.
1928 H. E. Larva, Finland	3m.53.2s.
1932 Luigi Beccali, Italy	3m.51.2s.
1936 J. E. Lovelock, New Zealand	3m.47.8s

5,000-Meter Run

1912 H. Kolehmainen, Finland	14m.36.6s.
1920 J. Guillemot, France	14m.55.6s.
1924 Paavo Nurmi, Finland	14m.31.2s.
1928 Willie Ritola, Finland	14m.38s.
1932 Lauri Lehtinen, Finland	14m.30s.
1936 Gunnar Hockert, Finland	14m.22.2s.

5-Mile Run

1906 H. Hawtrey, Great Britain	26m.26.2s.
1908 E. R. Voigt, Great Britain	25m.11.2s.

10,000-Meter Run

1912 H. Kolehmainen, Finland	31m.20.8s.
1920 Paavo Nurmi, Finland	31m.45.8s.
1924 Willie Ritola, Finland	30m.23.2s.
1928 Paavo Nurmi, Finland	30m.18.8s.
1932 Janusz Kusocinski, Poland	30m.11.4s.
1936 Ilmari Salminen, Finland	30m.15.4s.

Marathon

1896 S. Loues, Greece	2h.55m.20s.
1900 Teato, France	2h.59m.
1904 T. J. Hicks, United States	3h.28m.53s.
1906 W. J. Sherring, Canada	2h.51m.23.6s.
1908 John J. Hayes, United States	2h.55m.18.4s.
1912 K. K. McArthur, South Africa	2h.32m.35.8s.
1920 H. Kolehmainen, Finland	2h.32m.35.8s.
1924 A. O. Stenroos, Finland	2h.41m.22.6s.
1928 El Ouafi, France	2h.32m.57s.
1932 Juan Zabala, Argentina	2h.31m.36s.
1936 Kitei Son, Japan	2h.29m.19.2s.

110-Meter Hurdles

1896 Curtis, United States	17.6s.
1900 A. E. Kraenzlein, United States	15.4s.
1904 F. W. Schule, United States	16s.
1906 R. G. Laevitt, United States	16.2s.
1908 Forrest Smithson, United States	15s.
1912 F. W. Kelly, United States	15.1s.
1920 E. J. Thomson, Canada	14.8s.
1924 D. C. Kinsey, United States	15s.
1928 S. Atkinson, South Africa	14.8s.
1932 George Saling, United States	14.6s.
1936 Forrest Towns, United States	14.2s.

200-Meter Hurdles

1900 A. E. Kraenzlein, United States	25.4s
1904 H. L. Hillman, United States	24.6s

400-Meter Hurdles

1900 J. W. B. Tewksbury, United States	57.6s.
1904 H. L. Hillman, United States	53s.
1908 C. J. Bacon, United States	55s.
1920 F. F. Loomis, United States	54s.
1924 F. M. Taylor, United States	52.6s.
1928 Lord David Burghley, Great Britain	53.4s.
1932 Robert Tisdall, Ireland	51.8s.*
1936 Glenn Hardin, United States	52.4s.

*Record not allowed.

2,500-Meter Steeplechase

1900 G.W. Orton, United States	7m.34s.
1904 J.D. Lightbody, United States	7m.39.6s.

3,000-Meter Steeplechase

1920 P. Hodge, Great Britain.....	10m.2.4s.
1924 Willie Ritola, Finland.....	9m.33.6s.
1928 T. A. Loukola, Finland.....	9m.21.8s.
1932 Volmari Iso-Hollo, Finland.....	10m.33.4s.
(About 3,450 meters—extra lap by error)	
1936 Volmari Iso-Hollo, Finland.....	9m.3.8s.

3,200-Meter Steeplechase

1908 A. Russell, Great Britain.....	10m.47.8s.
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4,000-Meter Steeplechase

1900 C. Rimmer, Great Britain.....	12m.53.4s.
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3,000-Meter Team

1912 United States.....	9 pts.
1920 United States.....	10 pts.
1924 Finland.....	8 pts.

3-Mile Team

1908 Great Britain.....	6 pts.
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8,000-Meter X-Country

1912 H. Kolehmainen, Finland.....	45m.11.6s.
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8,000-Meter X-Country Team

1912 Sweden.....	
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10,000-Meter X-Country

1920 Paavo Nurmi, Finland.....	27m.15s.
1924 Paavo Nurmi, Finland.....	32m.54.8s.

10,000-Meter X-Country Team

1912 Sweden.....	10 pts.
1920 Finland.....	10 pts.
1924 Finland.....	11 pts.

1,500-Meter Walk

1906 George V. Bonhag, United States.....	7m.12.6s.
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3,000-Meter Walk

1906 G. Stantics, Hungary.....	Time not taken
1920 Ugo Frigerio, Italy.....	13m.14.2s.

3,500-Meter Walk

1908 G. E. Larner, Great Britain.....	14m.55s.
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10,000-Meter Walk

1912 G. H. Goulding, Canada.....	46m.28.4s.
1920 Ugo Frigerio, Italy.....	48m.6.2s.
1924 Ugo Frigerio, Italy.....	47m.49s.

10-Mile Walk

1908 G. E. Larner, Great Britain.....	1h.15m.57.4s.
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50,000-Meter Walk

1932 Thomas W. Green, Great Britain.....	4h.50m.10s.
1936 Harold Whitlock, Great Britain.....	4h.30m.41.4s.

400-Meter Relay

1912 Great Britain.....	42.4s.
1920 United States.....	42.2s.
1924 United States.....	41s.
1928 United States.....	41s.
1932 United States.....	40s.
1936 United States.....	39.8s.

1,600-Meter Relay

1908 United States.....	3m.27.2s.
1912 United States.....	3m.16.6s.
1920 Great Britain.....	3m.22.2s.
1924 United States.....	3m.16s.
1928 United States.....	3m.14.2s.
1932 United States.....	3m.8.2s.
1936 Great Britain.....	3m.9s.

Pole Vault

1896 W. W. Hoyt, United States.....	10ft.9 $\frac{3}{4}$ in.
1900 I. K. Baxter, United States.....	10ft.9.6in.
1904 C. E. Dvorak, United States.....	11ft.6in.
1906 Gonder, France.....	11ft.6in.
1908 A. C. Gilbert, United States.....	12ft.2in.
E. T. Cook, Jr., United States.....	
1912 H. J. Babcock, United States.....	12ft.11 $\frac{1}{2}$ in.
1920 F. K. Foss, United States.....	13ft.5in.
1924 L. S. Barnes, United States.....	12ft.11 $\frac{1}{2}$ in.
1928 Sabin W. Carr, United States.....	13ft.9 $\frac{3}{4}$ in.
1932 William Miller, United States.....	14ft.1 $\frac{1}{2}$ in.
1936 Earle Meadows, United States.....	14ft.3 $\frac{3}{4}$ in.

Standing High Jump

1900 R. C. Ewry, United States.....	5ft.5in.
1904 R. C. Ewry, United States.....	4ft.11in.
1906 R. C. Ewry, United States.....	5ft.1 $\frac{1}{2}$ in.
1908 R. C. Ewry, United States.....	5ft.2in.
1912 Platt Adams, United States.....	5ft.4 $\frac{1}{2}$ in.

Running High Jump

1896 E. H. Clark, United States.....	5ft.11 $\frac{1}{4}$ in.
1900 I. K. Baxter, United States.....	6ft.2 $\frac{1}{2}$ in.
1904 S. S. Jones, United States.....	5ft.11in.
1906 Con Leahy, Ireland.....	5ft.9 $\frac{3}{4}$ in.
1908 H. F. Porter, United States.....	6ft.3in.
1912 A. W. Richards, United States.....	6ft.4in.
1920 R. W. Landon, United States.....	6ft.4 $\frac{1}{2}$ in.
1924 H. M. Osborn, United States.....	6ft.5 $\frac{1}{2}$ in.
1928 Robert W. King, United States.....	6ft.4 $\frac{1}{2}$ in.
1932 Duncan McNaughton, Canada.....	6ft.5 $\frac{1}{2}$ in.
1936 Cornelius Johnson, United States.....	6ft.7 $\frac{1}{4}$ in.

Standing Broad Jump

1900 R. C. Ewry, United States.....	10ft.6 $\frac{3}{4}$ in.
1904 R. C. Ewry, United States.....	11ft.4 $\frac{1}{2}$ in.
1906 R. C. Ewry, United States.....	10ft.10in.
1908 R. C. Ewry, United States.....	10ft.11 $\frac{1}{2}$ in.
1912 C. Tscilitiras, Greece.....	11ft.1 $\frac{1}{2}$ in.

Running Broad Jump

1896 E. H. Clark, United States.....	20ft.9 $\frac{3}{4}$ in.
1900 A. E. Kraenzlein, United States.....	23ft.6 $\frac{3}{4}$ in.
1904 Myer Prinstein, United States.....	24ft.1in.
1906 Myer Prinstein, United States.....	23ft.7 $\frac{1}{2}$ in.
1908 Frank Irons, United States.....	24ft.6 $\frac{1}{2}$ in.
1912 A. L. Gutterson, United States.....	24ft.11 $\frac{1}{2}$ in.
1920 Wm. Petterson, Sweden.....	23ft.5 $\frac{1}{2}$ in.
1924 DeHart Hubbard, United States.....	24ft.5 $\frac{1}{2}$ in.
1928 Edward B. Hamm, United States.....	25ft.4 $\frac{1}{2}$ in.
1932 Edward Gordon, United States.....	25ft.3 $\frac{1}{2}$ in.
1936 Jesse Owens, United States.....	26ft.5 $\frac{1}{2}$ in.

Standing Hop, Step, and Jump

1900 R. C. Ewry, United States.....	34ft. 8½in.
1904 R. C. Ewry, United States.....	34ft. 7¼in.

Running Hop, Step, and Jump

1896 J. B. Connolly, United States.....	45ft.
1900 Myer Prinstein, United States.....	47ft. 4½in.
1904 Myer Prinstein, United States.....	47ft.
1906 P. O'Connor, Ireland.....	46ft. 2in.
1908 T. J. Ahearne, Great Britain.....	48ft. 11¼in.
1912 G. Lindblom, Sweden.....	48ft. 5½in.
1920 V. Tuulos, Finland.....	47ft. 6¼in.
1924 A. W. Winter, Australia.....	50ft. 11½in.
1928 Mikio Oda, Japan.....	49ft. 10½in.
1932 Chuhei Nambu, Japan.....	51ft. 7in.
1936 Naoto Tajima, Japan.....	52ft. 5¼in.

16-Lb. Shot-put

1896 R. S. Garrett, United States.....	36ft. 2in.
1900 R. Sheldon, United States.....	46ft. 3½in.
1904 Ralph Rose, United States.....	48ft. 7in.
1906 M. J. Sheridan, United States.....	40ft. 4½in.
1908 Ralph Rose, United States.....	46ft. 7½in.
1912 P. J. McDonald, United States.....	50ft. 4in.
1920 V. Porhola, Finland.....	48ft. 7½in.
1924 Clarence Houser, United States.....	49ft. 2½in.
1928 John Kuck, United States.....	52ft. 1½in.
1932 Leo Sexton, United States.....	52ft. 6¼in.
1936 Hans Woellke, Germany.....	53ft. 1½in.

16-Lb. Shot-put (Both Hands)

1912 Ralph Rose, United States.....	90ft. 5½in.
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16-Lb. Hammer Throw

1900 J. J. Flanagan, United States.....	167ft. 4in.
1904 J. J. Flanagan, United States.....	168ft. 1in.
1908 J. J. Flanagan, United States.....	170ft. 4¼in.
1912 M. J. McGrath, United States.....	177ft. 7in.
1920 P. J. Ryan, United States.....	173ft. 5½in.
1924 F. D. Tootell, United States.....	174ft. 10¼in.
1928 Patrick O'Callaghan, Ireland.....	168ft. 7in.
1932 Patrick O'Callaghan, Ireland.....	176ft. 11½in.
1936 Karl Hein, Germany.....	185ft. 4in.

56-Lb. Weight Throw

1904 E. Desmarteau, Canada.....	34ft. 4in.
1920 P. J. McDonald, United States.....	36ft. 11½in.

Discus Throw

1896 R. S. Garrett, United States.....	95ft. 7½in.
1900 R. Bauer, Hungary.....	118ft. 2.9in.
1904 M. J. Sheridan, United States.....	128ft. 10½in.
1906 M. J. Sheridan, United States.....	136ft. ¾in.
1908 M. J. Sheridan, United States.....	134ft. 2in.
1912 A. R. Taipale, Finland.....	148ft. 3.9in.
1920 E. Niklander, Finland.....	146ft. 7in.
1924 Clarence Houser, United States.....	151ft. 5¼in.
1928 Clarence Houser, United States.....	155ft. 2¼in.
1932 John Anderson, United States.....	162ft. 4½in.
1936 Ken Carpenter, United States.....	165ft. 7½in.

Discus Throw—Greek Style

1906 W. Jaervinen, Finland.....	115ft. 4in.
1908 M. J. Sheridan, United States.....	124ft. 8in.

Discus Throw (Right and Left Hand)

1912 A. R. Taipale, Finland.....	271ft. 10½in.
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Javelin Throw

1906 E. Lemming, Sweden.....	175ft. 6in.
1908 E. Lemming, Sweden.....	179ft. 10½in.
1912 E. Lemming, Sweden.....	198ft. 11¼in.
1920 Jonni Myyra, Finland.....	215ft. 9¼in.
1924 Jonni Myyra, Finland.....	206ft. 6¼in.
1928 E. H. Lundquist, Sweden.....	218ft. 6½in.
1932 Matti Jarvinen, Finland.....	238ft. 7in.
1936 Gerhard Stoeck, Germany.....	235ft. 8½in.

**Javelin Throw
(Free Style)**

1908 E. V. Lemming, Sweden.....	178ft. 7½in.
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**Javelin Throw
(Both Hands)**

1912 J. J. Saaristo, Finland.....	358ft. 11½in.
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Pentathlon

1906 H. Mellander, Sweden.....	24 pts.
1912 F. R. Bie, Norway.....	21 pts.
1920 E. R. Lehtonen, Finland.....	14 pts.
1924 E. R. Lehtonen, Finland.....	16 pts.

Decathlon

1912 H. Wieslander, Sweden.....	7,724.495 pts.
1920 H. Lovland, Norway.....	6,804.35 pts.
1924 H. M. Osborn, United States.....	7,710.775 pts.
1928 Paavo Yrjala, Finland.....	8,053.29 pts.
1932 James Bausch, United States.....	8,462.23 pts.
1936 Glenn Morris, United States.....	7,900 pts.

(Old point system used from 1912 to 1932; new point system used in 1936.)

TRACK AND FIELD—WOMEN**100-Meter Run**

1928 Elizabeth Robinson, United States.....	12.2s.
1932 Stanisława Walasiewicz, Poland.....	11.9s.
1936 Helen Stephens, United States.....	11.5s.

800-Meter Run

1928 Lina Radke, Germany.....	2m. 16.8s.
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80-Meter Hurdles

1932 Mildred Didrikson, United States.....	11.7s.
1936 Trebisonda Valla, Italy.....	11.7s.

400-Meter Relay

1928 Canada.....	48.4s.
1932 United States.....	47s.
1936 United States.....	46.9s.

Running High Jump

1928 Ethel Catherwood, Canada.....	5ft. 3in.
1932 Jean Shiley, United States.....	5ft. 5¼in.
1936 Ibolya Csak, Hungary.....	5ft. 3in.

Discus Throw

1928 H. Konopacka, Poland.....	129ft. 11½in.
1932 Lillian Copeland, United States.....	133ft. 2in.
1936 Gisela Mauermayer, Germany.....	156ft. 3¼in.

Javelin Throw

1932 Mildred Didrikson, United States.....	143ft. 4in.
1936 Tilly Fleischer, Germany.....	148ft. 2¼in.

SWIMMING—MEN

50 Yards

1904 Zoltan de Halomay, Hungary.....28s.

100 Meters

1896 Alfred Hajos, Hungary.....1m.22.2s.
 1904 Zoltan de Halomay, Hungary.....1m.2.8s.*
 1906 C. M. Daniels, United States.....1m.13s.
 1908 C. M. Daniels, United States.....1m.5.6s.
 1912 Duke P. Kahanamoku, United States.....1m.3.4s.
 1920 Duke P. Kahanamoku, United States.....1m.1.4s.
 1924 John Weissmuller, United States.....59s.
 1928 John Weissmuller, United States.....58.6s.
 1932 Yasuji Miyazaki, Japan.....58.2s.
 1936 Ferenc Csik, Hungary.....57.6s.
 *100 yards

220 Yards

1900 F. C. V. Lane, Australia.....
 1904 C. M. Daniels, United States.....2m.44.2s.

400 Meters

1904 C. M. Daniels, United States.....6m.16.2s.*
 1906 Otto Sheff, Austria.....6m.23.8s.
 1908 H. Taylor, Great Britain.....5m.36.8s.
 1912 G. R. Hodgson, Canada.....5m.24.4s.
 1920 N. Ross, United States.....5m.26.8s.
 1924 John Weissmuller, United States.....5m.4.2s.
 1928 Albert Zorilla, Argentina.....5m.1.6s.
 1932 Clarence Crabbe, United States.....4m.48.4s.
 1936 Jack Medica, United States.....4m.44.5s.
 *440 yards

500 Meters

1896 Paul Neumann, Austria

880 Yards

1904 Emil Rausch, Germany.....13m.11.4s

1,000 Meters

1900 Jarvis, Great Britain

1,200 Meters

1896 Alfred Hajos, Hungary

1,500 Meters

1908 H. Taylor, Great Britain.....22m.48.4s.
 1912 G. R. Hodgson, Canada.....22m.
 1920 N. Ross, United States.....22m.23.2s.
 1924 A. M. Charlton, Australia.....20m.6.6s.
 1928 Arne Borg, Sweden.....19m.51.8s.
 1932 Kusuo Kitamura, Japan.....19m.12.4s.
 1936 Noboru Terada, Japan.....19m.13.7s.

1,600 Meters

1906 H. Taylor, Great Britain.....28m.28s.

One Mile

1904 Emil Rausch, Germany.....27m.18.2s.

Plunge for Distance

1904 W. E. Dickey, United States.....62ft.6in.

800-Meter Relay

1908 Great Britain.....10m.55.6s.
 1912 Australia.....10m.11.6s.
 1920 United States.....10m.4.4s.
 1924 United States.....9m.53.4s.
 1928 United States.....9m.36.2s.
 1932 Japan.....8m.58.4s.
 1936 Japan.....8m.51.5s.

100-Meter Backstroke

1904 Walter Brack, Germany.....1m.16.8s.*
 1908 Arno Bieberstein, Germany.....1m.24.6s.
 1912 Harry Hebner, United States.....1m.21.2s.
 1920 Warren Kealoha, United States.....1m.15.2s.
 1924 Warren Kealoha, United States.....1m.13.2s.
 1928 George Kojac, United States.....1m.8.2s.
 1932 Masaji Kiyokawa, Japan.....1m.8.6s.
 1936 Adolph Kiefer, United States.....1m.5.9s.
 *100 yards

200-Meter Breast Stroke

1908 F. Holman, Great Britain.....3m.9.2s.
 1912 Walter Bathe, Germany.....3m.1.8s.
 1920 H. Malmroth, Sweden.....3m.4.4s.
 1924 R. D. Skelton, United States.....2m.56.6s.
 1928 Y. Tsuruta, Japan.....2m.48.8s.
 1932 Yoshiyuki Tsuruta, Japan.....2m.45.4s.
 1936 Tetsuo Hamuro, Japan.....2m.42.5s.

400-Meter Breast Stroke

1904 Georg Zacharias, Germany.....7m.23.6s.
 1920 H. Malmroth, Sweden.....6m.31.8s

1,000-Meter Team Race

1906 Hungary.....17m.16.2s.

Springboard Diving

	Points
1904 G. E. Sheldon, United States.....	12 2-3
1906 Gottlob Walz, Germany.....	
1908 Albert Zuerner, Germany.....	85.5
1912 Paul Guenther, Germany.....	6
1920 L. E. Kuehn, United States.....	6
1924 A. C. White, United States.....	7
1928 P. Desjardins, United States.....	185.04
1932 Michael Galitzen, United States.....	161.38
1936 Richard Degener, United States.....	163.57

Fancy High Diving

	Points
1912 Eric Adlerz, Sweden.....	7
1920 C. E. Pinkston, United States.....	7
1924 A. C. White, United States.....	9

Plain High Diving

	Points
1908 H. Johanssen, Sweden.....	83.70
1912 Erik Adlerz, Sweden.....	7
1920 Arvid Wallman, Sweden.....	7
1924 Richard Eve, Australia.....	13½

Plain and Fancy High Diving

	Points
1926 P. Desjardins, United States.....	98.74
1932 Harold Smith, United States.....	124.80
1936 Marshall Wayne, United States.....	113.58

WATER POLO

- 900 Great Britain
 904 United States
 908 Great Britain defeated Belgium
 912 Great Britain defeated Austria
 920 Great Britain defeated Belgium
 924 France defeated Belgium
 928 Germany defeated Hungary
 932 Hungary defeated Hungary
 936 Hungary

SWIMMING—WOMEN

100 Meters

- 912 Fanny Durack, Australia 1m.22.2s.
 920 Ethelda Bleibtrey, United States 1m.13.6s.
 924 Ethel Lackie, United States 1m.12.4s.
 928 Albina Osipowich, United States 1m.11s.
 932 Helene Madison, United States 1m.6.8s.
 936 Hendrika Mastenbroek, Holland 1m.5.9s.

300 Meters

- 920 Ethelda Bleibtrey, United States 4m.34s.

400 Meters

- 924 Martha Norelius, United States 6m.2.2s.
 928 Martha Norelius, United States 5m.42.8s.
 932 Helene Madison, United States 5m.28.5s.
 936 Hendrika Mastenbroek, Holland 5m.26.4s.

400-Meter Relay

- 912 Great Britain 5m.52.8s.
 920 United States 5m.11.6s.
 924 United States 4m.58.8s.
 928 United States 4m.47.6s.
 932 United States 4m.38s.
 936 Holland 4m.36s.

100-Meter Backstroke

- 924 Sybil Bauer, United States 1m.23.2s.
 928 Marie Braun, Holland 1m.22s.
 932 Eleanor Holm, United States 1m.19.4s.
 936 Dina Senff, Holland 1m.18.9s.

200-Meter Breast Stroke

- 924 Lucy Morton, Great Britain 3m.33.2s.
 928 Hilde Schrader, Germany 3m.12.6s.
 932 Clare Dennis, Australia 3m.6.3s.
 936 Hideko Maehata, Japan 3m.3.6s.

Plain High Diving

- | | Points |
|-----------------------------------------|--------|
| 912 Greta Johansson, Sweden | 39.9 |
| 920 Miss Fryland, Denmark | 6 |
| 924 Caroline Smith, United States | 9 |

Fancy Springboard Diving

- | | Points |
|--------------------------------------------|--------|
| 920 Aileen Riggan, United States | 9 |
| 924 Elizabeth Becker, United States | 8 |
| 928 Helen Meany, United States | 78.62 |
| 932 Georgia Coleman, United States | 87.52 |
| 936 Marjorie Gestring, United States | 89.27 |

Plain and Fancy High Diving

- | | Points |
|----------------------------------------------------|--------|
| 928 Elizabeth B. Pinkston, United States | 31.60 |
| 932 Dorothy Poynton, United States | 40.26 |
| 936 Mrs. Dorothy Poynton Hill, United States | 33.93 |

POLO

- 900 Great Britain
 908 Great Britain
 920 Great Britain
 1924 Argentina
 1936 Argentina

BOXING

Flyweight

- 1904 George V. Finnegan, United States (105-lb. class)
 1920 Frank Genaro, United States
 1924 Fidel La Barba, United States
 1928 Anton Kocsis, Hungary
 1932 Stephen Enekes, Hungary
 1936 Willi Kaiser, Germany

Bantamweight

- 1904 O. L. Kirk, United States (115-lb. class)
 1908 H. Thomas, Great Britain
 1920 Walker, South Africa
 1924 W. H. Smith, South Africa
 1928 Vittorio Tamagnini, Italy
 1932 Horace Gwynne, Canada
 1936 Ulderico Sergio, Italy

Featherweight

- 1904 O. L. Kirk, United States
 1908 R. K. Gunn, Great Britain
 1920 Fritsch, France
 1924 John Fields, United States
 1928 L. Van Klaveren, Holland
 1932 Carmelo Ambrosio Robledo, Argentina
 1936 Oscar Casanovas, Argentina

Lightweight

- 1904 H. J. Spanger, United States
 1908 F. Grace, Great Britain
 1920 Samuel Mosberg, United States
 1924 Harold Nielsen, Denmark
 1928 Carlo Orlandi, Italy
 1932 Lawrence Stevens, South Africa
 1936 Imre Harangi, Hungary

Welterweight

- 1904 Al Young, United States
 1920 Schneider, Canada
 1924 J. S. Delarge, Belgium
 1928 Edward Morgan, New Zealand
 1932 Edward Flynn, United States
 1936 Sten Suvio, Finland

Middleweight

- 1904 Charles Mayer, United States
 1908 J. W. H. T. Douglas, Great Britain
 1920 H. W. Mallin, Great Britain
 1924 H. W. Mallin, Great Britain
 1928 Piero Toscani, Italy
 1932 Carmen Barth, United States
 1936 Jean Despeaux, France

Light Heavyweight

- 1920 Edward Eagan, United States
 1924 H. J. Mitchell, Great Britain
 1928 Victoria Avendano, Argentina
 1932 David E. Carstens, South Africa
 1936 Roger Michelot, France

Heavyweight

- 1904 Sam Berger, United States
 1908 A. L. Oldham, Great Britain
 1920 Rawson, Great Britain
 1924 Otto Von Porath, Norway
 1928 A. Rodriguez Jurado, Argentina
 1932 Santiago A. Lovell, Argentina
 1936 Herbert Runge, Germany

WRESTLING**CATCH-AS-CATCH-CAN****Flyweight**

1904 R. Curry, United States (105-lb. class)

Bantamweight

1904 George N. Mehnert, United States (115-lb. class)
 1908 George N. Mehnert, United States (119-lb. class)
 1924 Kustaa Pihlajamaki, Finland
 1928 K. Makinen, Finland
 1932 Robert Edward Pearce, United States
 1936 Odon Zombory, Hungary

Featherweight

1896 Karl Schumann, Germany
 1904 I. Niflot, United States
 1908 G. S. Dole, United States
 1920 Charles E. Ackerly, United States
 1924 Robin Reed, United States
 1928 Allie Morrison, United States
 1932 Herman Pihlajamaki, Finland
 1936 Kustaa Pihlajamaki, Finland

Lightweight

1904 B. J. Bradshaw, United States
 1908 G. de Relwyskow, Great Britain
 1920 Kalle Antilla, Finland
 1924 Russell Vis, United States
 1928 O. Kapp, Esthonia
 1932 Charles Pacome, France
 1936 Karoly Karpati, Hungary

Welterweight

1904 O. F. Roehm, United States
 1924 Hermann Gehri, Switzerland
 1928 A. J. Haavisto, Finland
 1932 Jack F. Van Bebber, United States
 1936 Frank Lewis, United States

Middleweight

1904 Charles Erickson, United States
 1908 S. V. Bacon, Great Britain
 1920 E. Leino, Finland
 1924 Fritz Haggmann, Switzerland
 1928 E. Kyburg, Switzerland
 1932 Ivar Johansson, Sweden
 1936 Emile Poivre, France

Light Heavyweight

1920 Anders Larsson, Sweden
 1924 John Spellman, United States
 1928 T. S. Sjostedt, Sweden
 1932 Peter Joseph Mehringer, United States
 1936 Knut Fridell, Sweden

Heavyweight

1904 B. Hansen, United States
 1908 G. C. O'Kelly, Great Britain
 1920 Roth, Switzerland
 1924 Harry Steele, United States
 1928 Johan C. Richthoff, Sweden
 1932 Johan C. Richthoff, Sweden
 1936 Kristjan Palusalu, Esthonia

BASKETBALL

1904 United States

1936 United States

ROWING**Eight-Oared Shell**

1900 United States.....6m.7½s.
 1904 United States
 1908 Great Britain
 1912 Great Britain.....6m.15s.
 1920 United States.....6m.2½s.
 1924 United States.....6m.33½s.
 1928 United States.....6m.3¼s.
 1932 United States.....6m.37½s.
 1936 United States.....6m.25.4s.

Single Sculls

1900 Barrelet, Belgium.....7m.35½s.
 1904 Frank B. Greer, United States
 1908 H. T. Blackstaffe, Great Britain
 1912 W. D. Kinear, Great Britain.....7m.47½s.
 1920 J. B. Kelly, United States.....7m.35s.
 1924 Jack Beresford, Jr., Great Britain.....7m.49½s.
 1928 Henry Robert Pearce, Australia.....7m.11s.
 1932 Henry Robert Pearce, Australia.....7m.44½s.
 1936 Gustav Schaffer, Germany.....8m.21.5s.

Double Sculls

1904 United States
 1908 J. R. K. Fenning and G. L. Thomson, Great Britain
 1920 J. B. Kelly and Paul V. Costello, United States
 7m.9s.
 1924 J. B. Kelly and Paul V. Costello, United States.....6m.34s.
 1928 Paul V. Costello and Charles J. McIvaine, United States.....6m.41½s.
 1932 Kenneth Myers and W. E. Garrett Gilmore, United States.....7m.17½s.
 1936 Jack Beresford and Leslie Southwood, Great Britain.....7m.20.8s.

Four-Oared Shell with Coxswain

1900 Germany	1924 Switzerland..7m.18½s.
1906 Italy	1928 Italy.....6m.47½s.
1912 Germany....6m.59½s.	1932 Germany....7m.19½s.
1920 Switzerland..6m.54s.	1936 Germany....7m.16.2s.

Four-Oared Shell Without Coxswain

1904 United States	1928 Great Britain 6m.36s.
1908 Great Britain	1932 Great Britain 6m.58½s.
1924 Great Britain	1936 Germany....7m.1.8s.

Pair-Oared Shell with Coxswain

1900 R. Klein and F. A. Brandt, Holland.....7m.34 ½s.
 1906 Italy (1,600 Meters)
 1906 Italy (1,000 Meters)
 1920 M. Oigeni and G. Scatturin, Italy.....7m.56s.
 1924 M. Candevau and A. Felber, Switzerland..8m.39s.
 1928 H. W. Schochlin and C. F. Schochlin, Switzerland.....7m.42½s.
 1932 Joseph A. Schauers and Charles M. Kieffer, United States.....8m.25½s.
 1936 Gerhard Gustmann and Herbert Adamski, Germany.....8m.36.9s.

Pair-Oared Shell Without Coxswain

1904 United States.....10m.57s.
 1908 J. Fenning and G. Thomson, Great Britain..9m.41s.
 1924 W. H. Rosingh and A. C. Beynen, Holland..8m.19½s.
 1928 K. Moeschter and B. Muller, Germany....7m.6½s.
 1932 Lewis Clive and H. R. Arthur Edwards, Great Britain.....8m.
 1936 Willi Eichhorn and Hugo Strauss, Germany.8m.16.1s.

SOCCER

Source: Flannery News Bureau of New York.

National Challenge Cup Winners

Emblematic of United States Championship.

Senior amateur and professional elevens eligible for tournaments.)

- 14 Brooklyn (N. Y.) Field Club
 - 15 Bethlehem (Pa.) Steel Co. F. C.
 - 16 Bethlehem (Pa.) Steel Co. F. C.
 - 17 Fall River (Mass.) Rovers
 - 18 Bethlehem (Pa.) Steel Co. F. C.
 - 19 Bethlehem (Pa.) Steel Co. F. C.
 - 20 Ben Miller F. C., St. Louis, Mo.
 - 21 Robins Dry Dock F. C., Brooklyn, N. Y.
 - 22 Scullin Steel F. C., St. Louis, Mo.
 - 23 Paterson (N. J.) F. C.
 - 24 Fall River (Mass.) F. C.
 - 25 Shawsheen S. C., Andover, Mass.
 - 26 Bethlehem (Pa.) Steel Co. F. C.
 - 27 Fall River (Mass.) F. C.
 - 28 New York Nationals S. C.
 - 29 Hakoah All Stars, New York
 - 30 Fall River (Mass.) F. C.
 - 31 Fall River (Mass.) F. C.
 - 32 New Bedford (Mass.) F. C.
 - 33 Stix, Baer & Fuller F. C., St. Louis, Mo.
 - 34 Stix, Baer & Fuller F. C., St. Louis, Mo.
 - 35 Central Breweries S. C., St. Louis, Mo.
 - 36 First German American S. C., Philadelphia
 - 37 New York Americans S. C.
 - 38 Sparta A. B. A., Chicago, Ill.
 - 39 St. Mary's Celtic S. C., New York
 - 40 No official champion*
 - 41 Pawtucket (R. I.) F. C.
 - 42 Gallatin S. C., Pittsburgh
 - 43 Brooklyn (N. Y.) Hispano S. C.
 - 44 Brooklyn (N. Y.) Hispano S. C.
 - 45 Brookhattan S. C., New York
 - 46 Vikings, Chicago
 - 47 Ponta Delgada F. C., Fall River, Mass.
 - 48 Simpkin-Ford F. C., St. Louis, Mo.
- *Finalists: Baltimore (Md.) S. C. and Sparta A. B. A., Chicago, Ill.

National Amateur Challenge Cup Winners

- 1923 No official champion*
- 1924 Fleisher Yarn F. C., Philadelphia
- 1925 Toledo (Ohio) F. C.
- 1926 Defenders F. C., New Bedford, Mass.
- 1927 Heidelberg (Pa.) F. C.
- 1928 No official champion†
- 1929 Heidelberg (Pa.) F. C.
- 1930 Raffles F. C., Fall River, Mass.
- 1931 Goodyear F. C., Akron, Ohio
- 1932 Shamrock S. C., Cleveland, Ohio
- 1933 German American S. C., Philadelphia
- 1934 German American S. C., Philadelphia
- 1935 W. W. Riehl S. C., Castle Shannon, Pa.
- 1936 First German S. C., Brooklyn, N. Y.
- 1937 Highlander F. C., Trenton, N. J.
- 1938 Ponta Delgada F. C., Fall River, Mass.
- 1939 St. Michael's A. C., Fall River, Mass.
- 1940 Morgan Strasser S. C., Morgan, Pa.
- 1941 Fall River (Mass.) S. C.
- 1942 Fall River (Mass.) S. C.
- 1943 Morgan Strasser S. C., Morgan, Pa.
- 1944 Eintracht S. C., New York
- 1945 Eintracht S. C., New York
- 1946 Ponta Delgada F. C., Fall River, Mass.
- 1947 Ponta Delgada F. C., Fall River, Mass.
- 1948 Ponta Delgada F. C., Fall River, Mass.

*Medals to semifinalists: Fleisher Yarn F. C., Philadelphia; Roxbury (Mass.) F. C.; Jeannette (Pa.) F. C.; Swedish American A. A., Chicago, Ill. †Finalists: Powers-Hudson-Essex F. C., Fall River, Mass.; and Swedish American A. C., Detroit, Mich.

U. S. Victor in Tuna Contest

The Alton B. Sharp Trophy, emblematic of world tuna fishing supremacy, was won by the United States for the first time in the international matches at Wedgeport, Nova Scotia, last September. Points, scored on a fish-caught and poundage basis, follow: United States, 4,530; Cuba, 3,222; British Empire, 3,029; Argentina, 2,138.

SOFTBALL

Source: M. J. Pauley, Executive Secretary, Amateur Softball Association.

World Amateur Champions

- ear Men
- 933 J. L. Gills, Chicago, Ill.
- 934 Ke-Nash-A's, Kenosha, Wis.
- 935 Crimson Coaches, Toledo, Ohio
- 936 Kodak Park, Rochester, N. Y.
- 937 Briggs Mfg. Co., Detroit, Mich.
- 938 Pohlrs, Cincinnati, Ohio
- 939 Carr's, Covington, Ky.
- 940 Kodak Park, Rochester, N. Y.
- 941 Bendix Brakes, South Bend, Ind.
- 942 Deep Rock Oilers, Tulsa, Okla.
- 943 Hammer Field, Fresno, Calif.
- 944 Hammer Field, Fresno, Calif.
- 945 Zollners, Ft. Wayne, Ind.
- 946 Zollners, Ft. Wayne, Ind.
- 947 Zollners, Ft. Wayne, Ind.
- 948 Briggs Beauty Ware, Detroit

Women

- Great Northerns, Chicago, Ill.
- Hart Motors, Chicago, Ill.
- Bloomer Girls, Cleveland, Ohio
- National Mfg. Co., Cleveland, Ohio
- National Mfg. Co., Cleveland, Ohio
- J. J. Kreig's, Alameda, Calif.
- J. J. Kreig's, Alameda, Calif.
- Arizona Ramblers, Phoenix, Ariz.
- Higgins Midgets, Tulsa, Okla.
- Jax Maids, New Orleans, La.
- Jax Maids, New Orleans, La.
- Lind & Pomeroy, Portland, Ore.
- Jax Maids, New Orleans, La.
- Jax Maids, New Orleans, La.
- Jax Maids, New Orleans, La.
- Phoenix (Ariz.) Ramblers

SWIMMING

THERE IS THE ancient tale of Leander of Abydos swimming the Hellespont nightly to call on Helen of Sestos but nobody kept the time on his trips. However, Lord Byron swam one leg of the old Leander course, Sestos to Abydos, on May 3, 1810, in 1 hour 10 minutes. The famous British poet was a noted swimmer and once, in an endurance trial at Venice, was in the water for 4 hours 10 minutes. Distance swimming was the early type of competition. Captain Matthew Webb achieved fame by being the first to swim the English Channel—Dover to Calais—in August, 1875, in 21 hours 45 minutes. Many other swimmers, men and women, have conquered the

Channel since that time. Gertrude Ederle, of New York City, was the first woman to accomplish the feat. Miss Ederle swam the Channel Aug. 6, 1926, in 14 hours 34 minutes, breaking the existing record at that time. Since then the record has been lowered by four or five men.

Regular competition at short as well as long distances and indoor as well as outdoor came with the development of such organizations as the Amateur Athletic Union and the building of indoor and outdoor swimming pools. Swimming has been on the Olympic program since the start of the modern Olympic Games at Athens in 1896.

WORLD RECORDS

Source: *Official Amateur Athletic Union Swimming Rules and Records Book*. Reprinted by courtesy of the publishers, the Amateur Athletic Union of the United States, 233 Broadway, New York, N. Y., and R. M. Ritter, Secretary-Treasurer, International Amateur Swimming Federation.

Accepted by the International Amateur Swimming Federation as of August 15, 1948.

MEN

FREE STYLE

Distance	Time	Course	Holder	Home country	Where made	Date
100 yd.	49.7 s.	25 yd.	Alan Ford	U. S.	New Haven, Conn.	Mar. 18, 1944
100 m.	55.4 s.	25 m.	Alan Ford	U. S.	New Haven	June 29, 1948
200 m.	2m. 5.4 s.	25 m.	Alex Jany	France	Marseille, France	Sept. 20, 1946
220 yd.	2m. 7.1 s.	25 yd.	W. Smith	U. S.	Columbus	Feb. 12, 1944
300 yd.	3m. 4.4 s.	25 yd.	J. Medica	U. S.	Chicago	Apr. 10, 1935
300 m.	3 m. 21 s.	50 m.*	Alex Jany	France	Casablanca	Sept. 28, 1947
400 m.	4 m. 35.2 s.	50 m.*	Alex Jany	France	Monte Carlo	Sept. 12, 1947
440 yd.	4 m. 38.5 s.	25 yd.	W. Smith	U. S.	Honolulu	May 13, 1941
500 yd.	5 m. 16.3 s.	25 yd.	J. Medica	U. S.	New York	Apr. 6, 1935
500 m.	5 m. 56.5 s.	25 yd.*	R. Flanagan	U. S.	Miami, Fla.	Apr. 3, 1939
800 m.	9 m. 50.9 s.	110 yd.*	W. Smith	U. S.	Honolulu	July 24, 1941
880 yd.	9 m. 54.6 s.	55 yd.*	W. Smith	U. S.	New London, Conn.	Aug. 10, 1942
1,000 yd.	11 m. 37.4 s.	55 yd.	J. Medica	U. S.	Portland, Oregon	July 29, 1933
1,000 m.	12 m. 33.8 s.	50 m.	F. Amano	Japan	Tokyo	Aug. 10, 1938
1,500 m.	18 m. 58.8 s.	50 m.	F. Amano	Japan	Tokyo	Aug. 10, 1938
1 mi.	20 m. 29 s.	55 yd.*	K. Nakama	U. S.	New London	Aug. 8, 1942
400-yd. relay	3 m. 23.8 s.	25 yd.	New Haven S. C.	U. S.	New Haven, Conn.	July 2, 1948
			(A. Ford, E. Hueber, F. Dooley, H. Johnson)			
400-m. relay	3 m. 48.6 s.	25 m.	New Haven S. C.	U. S.	New Haven, Conn.	June 29, 1948
			(A. Ford, E. Hueber, F. Dooley, H. Johnson)			
800-yd. relay	8 m. 24.3 s.	50 yd.	Yale University	U. S.	New Haven, Conn.	June 9, 1936
			(P. Brueckel, R. Cooke, J. Macionis, N. Hoyt)			
800-m. relay	8 m. 46.0 s.	50 m.	National Team	U. S.	London, Eng.	Aug. 3, 1948
			(W. Ris, W. Wolf, J. McLane, W. Smith)			
300 yd.	2m. 50.5 s.	25 yd.	Univ. of Michigan	U. S.	Ann Arbor, Mich.	Feb. 15, 1947
			(H. Holiday, R. Sohl, R. Weinberg)			
300 m.	3 m. 12.3 s.	50 m.	Dauphinedu Toulouse	France	Marseille	Oct. 16, 1946
			(G. Vallery, A. Nakache, A. Jany)			

*Salt water.

BREAST STROKE

100 yd.	59.4 s.	25 yd.	Keith E. Carter	U. S.	Lafayette, Ind.	Dec. 12, 1947
100 m.	1 m. 7.3 s.	25 m.	R. Hough	U. S.	New Haven	Apr. 15, 1939
200 yd.	2 m. 14.7 s.	25 yd.	Joe Verdeur	U. S.	Ann Arbor, Mich.	Mar. 27, 1947
200 m.	2 m. 30.0 s.	25 m.	Joe Verdeur	U. S.	New Haven, Conn.	June 28, 1948
400 m.	5 m. 43.8 s.	25 m.	A. Heina	Germany	Copenhagen	Feb. 10, 1933
500 m.	7 m. 13 s.	25 m.	A. Heina	Germany	Solingen, Germany	May 7, 1933

BACKSTROKE

100 yd.	56.8 s.	25 yd.	A. Kiefer	U. S.	Annapolis, Md.	Feb. 26, 1947
100 m.	1 m. 04.0 s.	25 m.	Allen M. Stack	U. S.	New Haven, Conn.	June 23, 1947
150 yd.	1 m. 30.4 s.	25 yd.	A. Kiefer	U. S.	Honolulu	May 24, 1947
200 m.	2 m. 19.3 s.	25 yd.	A. Kiefer	U. S.	Annapolis	Mar. 4, 1947
400 m.	5 m. 03.9 s.	25 m.	Allen M. Stack	U. S.	New Haven, Conn.	Feb. 14, 1947

FREE STYLE—Women

Distance	Time	Course	Holder	Home country	Where made	Date
0 yd.	59.4 s.	25 m.*	F. Nathansen	Denmark	Aarhus, Denmark	Apr. 27, 1944
0 m.	1 m. 4.6 s.	25 m.	W. DenOuden	Netherlands	Amsterdam	Feb. 27, 1936
0 m.	2 m. 21.7 s.	25 m.	R. Hveger	Denmark	Aarhus	Sept. 11, 1938
0 yd.	2 m. 22.6 s.	25 yd.*	R. Hveger	Denmark	Copenhagen	Apr. 23, 1939
0 yd.	3 m. 25.6 s.	25 yd.*	R. Hveger	Denmark	Copenhagen	Oct. 2, 1938
0 m.	3 m. 42.5 s.	25 m.	R. Hveger	Denmark	Copenhagen	Sept. 15, 1940
0 m.	5 m. 0.1 s.	25 m.	R. Hveger	Denmark	Copenhagen	Sept. 15, 1940
0 yd.	5 m. 7.9 s.	25 yd.	Ann Curtis	U. S.	Seattle, Wash.	May 2, 1947
0 yd.	5 m. 53 s.	25 m.	R. Hveger	Denmark	Copenhagen	Apr. 19, 1942
0 m.	6 m. 27.4 s.	25 m.	R. Hveger	Denmark	Copenhagen	Feb. 11, 1940
0 m.	10 m. 52.5 s.	50 m.*	R. Hveger	Denmark	Copenhagen	Aug. 13, 1941
0 yd.	11 m. 8.6 s.	50 yd.*	Ann Curtis	U. S.	San Francisco	July 30, 1944
000 yd.	12 m. 36 s.	50 m.*	R. Hveger	Denmark	Helsingør, Den.	Sept. 4, 1938
000 m.	13 m. 54.4 s.	50 m.*	R. Hveger	Denmark	Copenhagen	Aug. 20, 1941
500 m.	20 m. 57 s.	50 m.*	R. Hveger	Denmark	Copenhagen	Aug. 20, 1941
mi.	23 m. 11.5 s.	50 m.*	R. Hveger	Denmark	Helsingør	July 3, 1938
10-yd. relay	4 m. 5.7 s.	25 yd.*	National Team	Denmark	Copenhagen	Apr. 11, 1943
(F. Nathansen, K. O. Petersen, B. O. Petersen, K. M. Harup)						
10-m. relay	4 m. 27.6 s.	25 m.	National Team	Denmark	Copenhagen	Aug. 7, 1938
(E. Arndt, G. Kraft, B. O. Petersen, R. Hveger)						
10 yd.	3 m. 19.6 s.		National Team	Netherlands	Hilversum	May 4, 1947
(I. K. van Feggelin, N. van Vliet, H. Jermculen)						
10 m.	3 m. 42.4 s.		National Team	Netherlands	Arnhem, Neth.	April 28, 1947
(I. K. van Feggelin, N. van Vliet, H. Jermculen)						

*Salt water.

BREAST STROKE—Women

10 yd.	1 m. 9.2 s.	25 yd.	N. van Vliet	Netherlands	Hilversum	May 4, 1947
10 m.	1 m. 18.2 s.	25 m.	N. van Vliet	Netherlands	Arnhem	Apr. 28, 1947
10 yd.	2 m. 35.6 s.	25 m.	N. van Vliet	Netherlands	The Haag	Aug. 24, 1946
10 m.	2 m. 49.2 s.	25 m.	N. van Vliet	Netherlands	Hilversum	July 20, 1948
10 m.	5 m. 58.6 s.	25 m.	N. van Vliet	Netherlands	Hilversum	Nov. 3, 1947
10 m.	7 m. 41 s.	25 m.	N. van Vliet	Netherlands	Hilversum	Dec. 1, 1946

BACKSTROKE—Women

10 yd.	1 m. 5.1 s.	25 m.	Cor Kint	Netherlands	Rotterdam	Sept. 8, 1939
10 m.	1 m. 10.9 s.	25 m.	Cor Kint	Netherlands	Rotterdam	Sept. 22, 1939
10 yd.	1 m. 42.1 s.	25 m.	Cor Kint	Netherlands	Rotterdam	Sept. 29, 1939
10 m.	2 m. 38.8 s.	25 m.	Cor Kint	Netherlands	Rotterdam	Nov. 26, 1939
10 m.	5 m. 38.2 s.	25 m.	R. Hveger	Denmark	Copenhagen	Mar. 2, 1941

NATIONAL A. A. U. SWIMMING CHAMPIONS, 1948

Men's Outdoor

100-M. FREE STYLE—Robert Nugent, New York A. C.
 100-M. FREE STYLE—Ed Gilbert, Austin, Texas
 100-M. FREE STYLE—Jimmy McLane, New Haven S. C.
 100-M. FREE STYLE—Jimmy McLane, New Haven S. C.
 500-M. FREE STYLE—Jack Taylor, Akron Firestone Club
 100-M. BACKSTROKE—Allen Stack, Yale
 100-M. BREAST STROKE—Joe Verdeur, Brighton Hotel Club, Atlantic City
 100-M. MEDLEY—Joe Verdeur
 100-M. MEDLEY RELAY—Brighton Hotel Club
 100-M. FREE-STYLE RELAY—New Haven S. C.
 PLATFORM DIVE—Bruce Harlan, Ohio State
 SPRINGBOARD DIVE—Bruce Harlan
 TEAM—Brighton Hotel Club, Atlantic City
 LONG DISTANCE—Forbes Norris, Harvard
 LONG-DISTANCE TEAM—Univ. Circle Y, Cleveland

Men's Indoor

100-YD. FREE STYLE—Wally Ris, Iowa
 100-YD. FREE STYLE—Bill Smith, Ohio State
 100-YD. FREE STYLE—Bill Smith
 500-M. FREE STYLE—Jack Taylor
 100-YD. BACKSTROKE—Allen Stack, Yale
 100-YD. BREASTSTROKE—Joseph Verdeur
 100-YD. MEDLEY—Joseph Verdeur
 100-YD. MEDLEY RELAY—Michigan
 100-YD. RELAY—New Haven S. C.
 1-M. DIVE—Miller Anderson, Ohio State
 1-M. DIVE—Miller Anderson
 TEAM—Ohio State

Women's Outdoor

100-M. FREE STYLE—Ann Curtis, San Francisco
 400-M. FREE STYLE—Ann Curtis
 800-M. FREE STYLE—Ann Curtis
 1,500-M. FREE STYLE—Joan Mallory, San Francisco
 100-M. BACKSTROKE—Suzanne Zimmerman, Portland, Oreg.
 200-M. BACKSTROKE—Suzanne Zimmerman
 100-M. BREASTSTROKE—Jeanne Wilson, Chicago
 200-M. BREASTSTROKE—Jeanne Wilson
 300-M. MEDLEY—Barbara Jensen, Oakland, Calif.
 300-M. MEDLEY RELAY—Los Angeles A. C. "A" team
 800-M. FREE-STYLE RELAY—Crystal Plunge, San Francisco
 1-M. DIVE—Zoe Ann Olsen, Oakland, Calif.
 3-M. DIVE—Zoe Ann Olsen
 TEAM—Crystal Plunge

Women's Indoor

100-YD. FREE STYLE—Marie Corridon, New York
 220-YD. FREE STYLE—Ann Curtis, San Francisco
 440-YD. FREE STYLE—Ann Curtis
 100-YD. BACKSTROKE—Suzanne Zimmerman
 200-YD. BACKSTROKE—Suzanne Zimmerman
 100-YD. BREASTSTROKE—Carol Pence, St. Louis
 220-YD. BREASTSTROKE—Clara Lamore, Providence, R. I.
 300-YD. MEDLEY—Mrs. Nancy Merki Lees, Portland, Oreg.
 300-YD. MEDLEY RELAY—Multnomah A. C., Portland, Oreg.
 400-YD. FREE-STYLE RELAY—Crystal Plunge, San Francisco
 1-M. DIVE—Mrs. Victoria M. Draves, Los Angeles
 3-M. DIVE—Zoe Ann Olsen, Oakland, Calif.
 TEAM—Crystal Plunge

NATIONAL COLLEGIATE A. A. CHAMPIONS, 1948

Source: Walter Byers, Executive Assistant, N.C.A.A.

Track and Field

100 M.—Mel Patton, Southern California
 200 M.—Mel Patton
 400 M.—Norman Rucks, South Carolina
 800 M.—Malvin Whitfield, Ohio State
 1,500 M.—Don Gehrmann, Wisconsin
 5,000 M.—Jerry Thompson, Texas
 10,000 M.—Bob Black, Rhode Island State
 3,000 M. STEEPCHASE—Browning Ross, Villanova
 110 M. HIGH HURDLES—Clyde Scott, Arkansas
 400-M. LOW HURDLES—George Walker, Illinois
 HOP, STEP, AND JUMP—Lloyd Lamois, Minnesota
 BROAD JUMP—Willie Steele, San Diego State
 HIGH JUMP—Dwight Eddleman, Illinois, and Irving Mondschein, New York University (tie)
 DISCUS—Fortune Gordien, Minnesota
 HAMMER—Samuel H. Felton, Jr., Harvard
 JAVELIN—Frank Held, Stanford
 POLE VAULT—Warren Bateman, Colorado, and George Rasmussen, Oregon (tie)
 SHOT-PUT—Charles Fonville, Michigan
 TEAM—Minnesota

Swimming

50-YD. FREE STYLE—Robert Anderson, Stanford
 100-YD. FREE STYLE—Wally Ris, Iowa
 220-YD. FREE STYLE—Bill Smith, Ohio State
 440-YD. FREE STYLE—Bill Smith
 1,500-M. FREE STYLE—William Heusner, Northwestern
 150-YD. BACKSTROKE—Allen Stack, Yale
 200-YD. BREAST STROKE—Joe Verdeur, LaSalle (Phila.)
 300-YD. MEDLEY RELAY—Michigan
 400-YD. FREE-STYLE RELAY—Michigan State
 1-M. DIVE—Bruce Harlan, Ohio State
 3-M. DIVE—Miller Anderson, Ohio State
 TEAM—Michigan

Tennis

SINGLES—Harry Likas, San Francisco
 DOUBLES—Fred Kovaleski-Bernard Bartzten, William and Mary
 TEAM—William and Mary

Basketball

Kentucky beat Baylor, 58 to 42, in final

Baseball

So. California beat Yale, 2 games to 1, in final

EASTERN BOXING CHAMPIONS

125 LB.—Allen Hollingsworth, Virginia
 130 LB.—Grover Masterson, Virginia
 135 LB.—James Miragliotta, Virginia
 145 LB.—Basil Miragliotta, Virginia
 155 LB.—Joseph Miragliotta, Virginia
 165 LB.—James Rollier, Syracuse
 175 LB.—Ralph Shoaf, Virginia
 HEAVYWEIGHT—Charles Drzenovich, Penn State
 TEAM—Virginia

WEIGHTLIFTING, 1948

National A. A. U. Champions

123 LB.—Joseph De Pietro, Bates W. C., Paterson, N. J.
 132 LB.—William Lawrence, San Diego, Calif.
 148 LB.—Joseph Pitman, York (Pa.) Barbell Club
 165 LB.—Frank Spellman, York (Pa.) Barbell Club
 181 LB.—Stanley Stanczyk, York (Pa.) Barbell Club
 HEAVYWEIGHT—John Davis, York (Pa.) Barbell Club
 TEAM—York (Pa.) Barbell Club

Wrestling

114.5 LB.—Arnold Plaza, Purdue
 125.5 LB.—George Lewis, Waynesburg
 136.5 LB.—Dick Dickenson, Michigan State
 147.5 LB.—Bill Koll, Iowa State Teachers
 160.5 LB.—Jack St. Clair, Oklahoma A. & M.
 174 LB.—Glen Brand, Iowa State College
 191.5 LB.—Vern Gagne, Minnesota
 HEAVYWEIGHT—Richard Hutton, Oklahoma A. & M.
 TEAM—Oklahoma A. & M.

Boxing

FLYWEIGHT—Ernie Charboneau, Michigan State
 BANTAMWEIGHT—Steve Gremban, Wisconsin
 FEATHERWEIGHT—Doug Ellwood, Louisiana State
 LIGHTWEIGHT—Charles Davey, Michigan State
 WELTERWEIGHT—Don Dickinson, Wisconsin
 MIDDLEWEIGHT—Herb Carlson, Idaho
 LIGHT HEAVYWEIGHT—Cal Vernon, Wisconsin
 HEAVYWEIGHT—Vito Parisi, Wisconsin
 TEAM—Wisconsin

Gymnastics

ALL-AROUND—Ray Sorensen, Penn State
 FLYING RINGS—George Hayes, Temple
 FREE EXERCISE—Robert Stout, Temple
 HORIZONTAL BAR—Joseph A. Calvetti, Illinois
 LONG HORSE—James Peterson, Minnesota
 PARALLEL BAR—Ray Sorensen, Penn State
 ROPE CLIMB—Ken Foreman, Southern California
 SIDE HORSE—Stephen Greene, Penn State
 TRAMPOLINE—Eric L. Hughes, Illinois
 TUMBLING—Charles Thompson, California
 TEAM—Penn State

Fencing

FOIL—Albert Axelrod, C. C. N. Y.
 EPEE—Bill Bryan, Navy
 SABER—Jim Day, Navy
 TEAM—C. C. N. Y.

INDIVIDUAL—Bobby Harris, San Jose State
 TEAM—San Jose State

Ice Hockey

Michigan beat Dartmouth, 8 to 4, in final.

INTERCOLLEGIATE F. A. CHAMPIONS, 1948

INDIVIDUAL

FOIL—Albert Axelrod, C. C. N. Y.
 EPEE—Bob Kaplan, New York University
 SABER—Jim Day, Navy

TEAM

THREE-WEAPON—C. C. N. Y.
 FOIL—C. C. N. Y.
 EPEE—Navy
 SABER—Navy

Cote Boston Marathon Victor

Gerard Cote of St. Hyacinthe, Quebec, in 1948 won the Boston Marathon for the fourth time since 1940. The Canadian was clocked in 2 hours 31 minutes 2 seconds in the fifty-second running of the 26-mile-385-yard grind.

EASTERN COLLEGE ATHLETIC CONFERENCE CHAMPIONS, 1948

Source: George Shiebler, Administrative Assistant, E.C.A.C.

TEAM

BASEBALL LEAGUE—Dartmouth
BASKETBALL LEAGUE—Columbia
FENCING ASSN.—C. C. N. Y.
GOLF ASSN.—Penn State
GYMNASTIC LEAGUE—Penn State
SWIMMING LEAGUE—Yale
TENNIS ASSN.—Cornell
WRESTLING ASSN.—Lehigh

Ice Hockey

INTERNATIONAL LEAGUE—Toronto
QUADRANGULAR LEAGUE—Dartmouth

Assn. of Rowing Colleges

VARSITY—Harvard
JUNIOR VARSITY—Yale
FRESHMAN—Yale
LIGHTWEIGHT VARSITY—Princeton
LIGHTWEIGHT JUNIOR VARSITY—Yale
LIGHTWEIGHT FRESHMAN—Harvard

Track and Field

INDOOR

HEPTAGONAL GAMES ASSN.—Army
C. A. A. A.—New York University
METROPOLITAN (NEW YORK) ASSN.—N. Y. U.

OUTDOOR

HEPTAGONAL GAMES ASSN.—Yale
C. A. A. A.—Yale
METROPOLITAN (NEW YORK) ASSN.—N. Y. U.
MIDDLE ATLANTIC ASSN.—St. Joseph's

INDIVIDUAL Gymnastics

ALL-AROUND—Robert Stout, Temple
FLYING RINGS—Lewis Jamison, Army
HORIZONTAL BAR—Robert Stout
PARALLEL BARS—Robert Stout
ROPE CLIMB—Marvin Schenker, Navy
SIDE HORSE—Stephen Greene, Penn State
TUMBLING—William Meade, Penn State

Swimming

50-YD. FREE STYLE—William Irwin, Rutgers
100-YD. FREE STYLE—Ned Broadbent, Yale
220-YD. FREE STYLE—Paul Girdes, Yale
440-YD. FREE STYLE—John Moore, Yale
400-YD. FREE-STYLE RELAY—Yale
150-YD. BACKSTROKE—Allen Stack, Yale
200-YD. BREASTSTROKE—Joseph Verdeur, LaSalle (Phila.)
300-YD. MEDLEY—Joseph Verdeur
300-YD. MEDLEY RELAY—LaSalle (Philadelphia)
1-M. DIVE—Albert Heston, Yale
3-M. DIVE—Albert Heston

Wrestling

121 LB.—Robert Schell, Franklin & Marshall
128 LB.—Stanley Mousetic, Franklin & Marshall
136 LB.—Richard Kelsey, Lehigh
145 LB.—John Fletcher, Navy
155 LB.—Stanley Thevenet, Army
165 LB.—Pascal Perri, Syracuse
175 LB.—James Jackson, Lehigh
HEAVYWEIGHT—Newbold Smith, Navy

OTHER CONFERENCE CHAMPIONS, 1948

Big Nine

BASEBALL—Illinois and Michigan (tie)
BASKETBALL—Michigan
FENCING—Northwestern
GOLF—Northwestern
GYMNASTICS—Minnesota
SWIMMING—Michigan
TENNIS—Northwestern
TRACK AND FIELD (indoor)—Ohio State
TRACK AND FIELD (outdoor)—Ohio State
WRESTLING—Purdue

Pacific Coast

BASEBALL—Southern California
BASKETBALL—Washington
GOLF (Northern Division)—Washington
GOLF (Southern Division)—Stanford
TENNIS (Northern Division)—Washington
TENNIS (Southern Div.)—So. California, U. C. L. A. (tie)
SWIMMING (Northern Division)—Washington
SWIMMING (Southern Division)—Stanford
TRACK AND FIELD—Southern California

Southern

BASKETBALL—North Carolina State
BOXING—The Citadel
SWIMMING—North Carolina
TENNIS—William and Mary
TRACK AND FIELD—North Carolina
WRESTLING—Washington and Lee

Southeastern

BASEBALL—Mississippi State
BASKETBALL—Kentucky
GOLF—Louisiana State
TENNIS—Tulane
TRACK AND FIELD—Louisiana State

Southwest

BASEBALL—Texas
BASKETBALL—Baylor
FENCING—Texas
GOLF—Texas A. & M.
SWIMMING—Texas
TENNIS—Texas
TRACK AND FIELD—Texas A. & M.

Big Seven

BASEBALL—Nebraska
BASKETBALL—Kansas State
GOLF—Oklahoma
TENNIS—Kansas
TRACK AND FIELD—Missouri

Colored A. A.

BASEBALL—Shaw
BASKETBALL—West Virginia State
BOXING—Hampton Institute and Morgan State (tie)
TENNIS—Howard
TRACK AND FIELD (Closed)—Howard
TRACK AND FIELD (Open)—Morgan State
WRESTLING—Hampton Institute

BOXING

WHETHER it be called pugilism, prize fighting or boxing, there is no tracing "the Sweet Science" to any definite source. Tales of rivals exchanging blows for fun, fame or money go back to earliest recorded history and classical legend. There was a mixture of boxing and wrestling called the "pancratium" in the ancient Olympic Games and in such contests the rivals belabored one another with hands fortified with heavy leather wrappings that were sometimes studded with metal. More than one Olympic competitor lost his life at this brutal exercise.

There was little law or order in pugilism until Jack Broughton, one of the early champions of England, drew up a set of rules for the game in 1743. Broughton, called "the father of English boxing", also is credited with having invented boxing gloves. However, these gloves—or "mufflers" as they were called—were used only in teaching "the manly art of self-defense" or in training bouts. All professional

championship fights were contested with "bare knuckles" until 1892 when John L. Sullivan lost the heavyweight championship of the world to James J. Corbett in New Orleans in a bout in which both contestants wore regulation gloves.

The Broughton rules were superseded by the London Prize Ring Rules of 1838. The 8th Marquess of Queensberry, with the help of John G. Chambers, put forward the "Queensberry Rules" in 1866, a code that called for gloved contests. Amateurs took quickly to the Queensberry Rules, the professionals slowly.

There is no official international set of rules for boxing even today. Amateur organizations set rules for amateurs in different countries and professional rules set by boxing commissions vary even in different sections of the United States, but the variations are for the most part minor. A prize fighter doesn't have to change his style greatly to ply his trade anywhere in the world.

Boxing Statistics

Source: Nat Fleischer's *All-Time Ring Record Book*, published and copyrighted by The Ring Book Shop, Inc., Madison Square Garden, New York, N. Y.

Boxing's Biggest Gates

WF—Won on foul.	ND—No decision.	(1st)—First bout.	(2d)—Second bout.	(3d)—Third bout.		
Date	Winner, weight	Loser, weight	Rounds	Site	Receipts	Attendance
Sept. 22, 1927	Tunney (189½)-Dempsey (192½) (2d)		10	Soldier Field, Chicago	\$2,658,660	104,943
June 19, 1946	Louis (207)-Conn (187) (2d)		KO 8	Yankee Stadium, New York	1,925,564	45,266
Sept. 23, 1926	Tunney (189½)-Dempsey (190) (1st)		10	Sesquicentennial Stdm., Phila.	1,895,733	120,757
July 2, 1921	Dempsey (188)-Carpentier (172)		KO 4	Boyle's 30 Acres, Jersey City	1,789,238	80,000
Sept. 14, 1923	Dempsey (192½)-Firpo (216½)		KO 2	Polo Grounds, New York	1,188,603*	82,000
July 21, 1927	Dempsey (194½)-Sharkey (196)		KO 7	Yankee Stadium, New York	1,083,530*	75,000
June 22, 1938	Louis (198½)-Schmeling (193) (2d)		KO 1	Yankee Stadium, New York	1,015,012*	70,000
Sept. 24, 1935	Louis (199½)-Max Baer (210½)		KO 4	Yankee Stadium, New York	1,000,832*	88,150
June 25, 1948	Louis (213½)-Walcott (194½) (2d)		KO 11	Yankee Stadium, New York	841,739	42,667
June 12, 1930	Schmeling (188)-Sharkey (197) (1st)		WF 4	Yankee Stadium, New York	749,935	79,222
June 22, 1937	Louis (197½)-Braddock (197)		KO 8	Comiskey Park, Chicago	715,470	45,500
July 26, 1928	Tunney (192)-Heeney (203½)		KO 11	Yankee Stadium, New York	691,014	45,890
Sept. 29, 1941	Louis (202½)-Nova (202½)		KO 6	Polo Grounds, New York	583,711	56,549
June 19, 1936	Schmeling (192)-Louis (198) (1st)		KO 12	Yankee Stadium, New York	547,541	42,088
Sept. 11, 1924	Wills (217)-Firpo (224½)		12	Boyle's 30 Acres, Jersey City	509,135	70,000
July 16, 1926	Delaney (166½)-Berlenbach (174½) (3d)		15	Ebbets Field, Brooklyn	461,789	49,186
July 23, 1923	Leonard (134)-Tendler (133½) (2d)		15	Yankee Stadium, New York	452,648	58,519
July 4, 1919	Dempsey (187)-Willard (245)		KO 3	Toledo, Ohio	452,224	19,650
June 18, 1941	Louis (199½)-Conn (174) (1st)		KO 13	Polo Grounds, New York	451,743	60,071
June 21, 1932	Sharkey (205)-Schmeling (188) (2d)		15	Long Island City Bowl, N. Y.	432,365	61,863
June 14, 1934	Max Baer (209½)-Carnera (263½)		KO 11	Long Island City Bowl, N. Y.	428,000	56,000
July 16, 1947	Graziano (154½)-Zale (159) (2d)		KO 6	Chicago Stadium	422,918	18,547
Feb. 27, 1929	Sharkey (192)-Stribling (182)		10	Flamingo Park, Miami Beach, Fla.	405,000	40,000
July 12, 1923	Firpo (214)-Willard (242)		KO 8	Boyle's 30 Acres, Jersey City	390,837	80,000
May 12, 1923	Firpo (212)-McAuliffe (200)		KO 3			
	Willard (245)-Floyd Johnson (195)		KO 11	Yankee Stadium, New York	385,040	31,000
June 27, 1929	Schmeling (187)-Uzcudun (192½) (1st)		15	Yankee Stadium, New York	378,902	65,000
July 27, 1922	Leonard (134½)-Tendler (134½) (1st)		ND 12	Boyle's 30 Acres, Jersey City	367,862	54,685
July 3, 1931	Schmeling (189)-Stribling (186½)		KO 15	Cleveland Stadium	349,415	37,396
Sept. 20, 1939	Louis (200)-Pastor (183) (2d)		KO 11	Briggs Stadium, Detroit	347,870	33,868
Sept. 27, 1946	Zale (160)-Graziano (154)		KO 6	Yankee Stadium, New York	342,497	39,827
Sept. 19, 1946	Louis (211½)-Mauriello (198½)		KO 1	Yankee Stadium, New York	335,063	38,494
June 28, 1939	Louis (200½)-Galento (233½)		KO 4	Yankee Stadium, New York	333,308	34,852
June 25, 1935	Louis (196)-Carnera (260½)		KO 6	Yankee Stadium, New York	328,655	62,000

*Includes income from other sources, such as motion pictures or radio, or both.

HISTORY OF WORLD HEAVYWEIGHT CHAMPIONSHIP FIGHT

(Bouts in which title changed hands)

WF—Won on foul.

Date	Where held	Winner, weight, age	Loser, weight, age	Rounds	Referee
July 8, 1889	Richburg, Miss.....	John L. Sullivan, 198 (30).... (Last bare-knuckle title fight)	Jake Kilrain, 195 (30).....	75	John Fitzpatrick
Sept. 7, 1892	New Orleans, La.....	James J. Corbett, 178 (26)...	John L. Sullivan, 212 (33)...	21	Prof. John Duffy
March 17, 1897	Carson City, Nev.....	Bob Fitzsimmons, 167 (34)...	James J. Corbett, 183 (30)...	KO 14	George Siler
June 9, 1899	Coney Island, N. Y.	*James J. Jeffries, 206 (24)...	Bob Fitzsimmons, 167 (37)...	KO 11	George Siler
Feb. 23, 1906	Los Angeles.....	†Tommy Burns, 180 (24)....	Marvin Hart, 188 (29).....	20	James J. Jeffries
Dec. 26, 1908	Sydney, N. S. W.	Jack Johnson, 196 (30).....	Tommy Burns, 176 (27)...	KO 14	Hugh McIntosh
		(Police stopped fight to save Burns from further punishment)			
July 4, 1910	Reno, Nev.....	Jack Johnson, 208 (31).....	James J. Jeffries, 227 (34)...	KO 15	Tex Rickard
		(Jeffries came out of retirement in an effort to regain title)			
April 5, 1915	Havana, Cuba.....	Jess Willard, 230 (31).....	Jack Johnson, 205½ (37)...	KO 26	Jack Welch
July 4, 1919	Toledo, Ohio.....	Jack Dempsey, 187 (24).....	Jess Willard, 245 (35).....	KO 3	Ollie Pecord
Sept. 23, 1926	Philadelphia.....	†Gene Tunney, 189½ (28)...	Jack Dempsey, 190 (31)...	10	Pop Reilly
June 12, 1930	New York.....	Max Schmeling, 188 (24).....	Jack Sharkey, 197 (27)....	WF 4	Jim Crowley
June 21, 1932	Long Island City.....	Jack Sharkey, 205 (29).....	Max Schmeling, 188 (26)...	15	Gunboat Smith
June 29, 1933	Long Island City.....	Primo Carnera, 260½ (26)...	Jack Sharkey, 201 (30).....	KO 6	Arthur Donovan
June 14, 1934	Long Island City.....	Max Baer, 209½ (25).....	Primo Carnera, 263¼ (27)...	KO 11	Arthur Donovan
June 13, 1935	Long Island City.....	Jim Braddock, 193¾ (29)...	Max Baer, 209½ (26).....	15	Jack McAvoy
June 22, 1937	Chicago.....	Joe Louis, 197¼ (23).....	Jim Braddock, 197 (31)...	KO 8	Tommy Thomas

*Lack of opposition caused Jeffries to retire in March 1905. He named Marvin Hart and Jack Root as the leading contenders and agreed to referee their fight at Reno, Nev., on July 3, 1905, with the stipulation that he would designate the winner the world champion. Hart, 190 (28), knocked out Root, 171 (29), in the twelfth round.

†Burns claimed the title after defeating Hart. Philadelphia Jack O'Brien became another claimant after fighting a 20-round draw with Burns at Los Angeles on Nov. 28, 1906, with Jeffries as the referee. Burns, 180 (25), eliminated O'Brien, 167 (29), by defeating him in 20 rounds at Los Angeles, May 8, 1907. Charles Eytton was the referee.

‡Tunney retired after his bout with Tom Heeney in New York on July 26, 1928. Tunney, 192 (30), knocked out Heeney, 203¼ (30), in the eleventh round. Ed Forbes was the referee.

BARE-KNUCKLE HEAVYWEIGHT CHAMPIONS, 1719-1892

1719—Jim Figg
1734—George Taylor
1740—Jack Broughton
1750—Jack Slack
1760—Bill Stevens
1761—George Meggs
1765—Bill Darts
1777—Harry Sellers
1780—Jack Harris
1785—Tom (Jackling) Johnson
1790—Big Ben Brain
1792—Daniel Mendoza
1795—John Jackson (retired)
1802—Jem Belcher
1805—Henry Pearce (Game Chicken)
1808—John Gully (declined title)
1809—Tom Cribb received belt, not transferable, and cup
1824—Tom Spring received four cups; resigned title.
1825—Jem Ward received belt, not transferable
1838—James (Deaf) Burke claimed title
1839—William Thompson (Bendigo) beat Burke; claimed championship; received belt from Jem Ward.
1841—Nick Ward (Jem's brother) beat Ben Caunt, Feb. 2. In return match Caunt beat Nick Ward and received belt by subscription. It was transferable.
1845—Thompson beat Caunt and got belt.
1850—Bill Perry (The Tipton Slasher), after fight with Paddock, claimed title.
1851—Harry Broome won title from Perry.
1853—Perry claimed title when Broome forfeited £200 to him in a match; retired from ring on Aug. 13.
1857—Tom Sayers beat Perry for £200 a side and new belt.
1860—Sayers retired after 42-round draw with John C. Heenan (The Benicia Boy), leaving old belt open for competition.

1860—Sam Hurst (The Stalybridge Infant) beat Paddock and received belt.
1861—Jem Mace beat Hurst.
1862—Mace beat Tom King for £200 a side and the belt.
1862—King beat Mace and claimed belt. Subsequently gave it up. Declined to meet Mace again. Mace claimed belt.
1863—King beat Heenan for £1,000 a side.
1865—Joe Wormald beat Andrew Marsden for £200 a side and belt, which had been claimed by both. Belt was given to Wormald, who forfeited £120 to Mace.
1866—Mace and Joe Goss fought draw with £200 a side and belt at stake.
1867—Wormald received £200 forfeit from Ned O'Baldwin and claimed belt when O'Baldwin failed to appear at starting place.
1867—Mace and O'Baldwin drew; £200 a side; title and belt in abeyance.
1868—Wormald and O'Baldwin drew; £200 a side and title in America.
1869—Mike McCool beat Tom Allen in America for world championship.
1870—Mace beat Allen in America for world championship.
1871—Mace and Joe Coburn fought draw for championship; £500 a side.
1882—John L. Sullivan defeated Paddy Ryan for American championship only; 9 rounds, Mississippi City, Miss. (London Prize Ring rules).
1885—Jem Smith beat Jack Davis for £100 a side and championship of England.
1887—Jake Kilrain and Jem Smith drew; \$10,000 and Police Gazette Championship of World belt.
1889—John L. Sullivan beat Jake Kilrain, 75 rounds, Richburg, Miss., July 8, in last bare-knuckle championship fight; \$10,000 a side and Police Gazette Belt. (Sullivan claimed world title because of draw fought with Kilrain with Smith, England's titleholder.)

Other World Boxing Titleholders

LIGHT HEAVYWEIGHT CHAMPIONS

- 1903 —Jack Root, George Gardner
 1903-05—Bob Fitzsimmons
 1905-12—Philadelphia Jack O'Brien
 1912-16—Jack Dillon
 1916-20—Battling Levinsky
 1920-22—Georges Carpentier
 1923 —Battling Siki
 1923-25—Mike McTigue
 1925-26—Paul Berlenbach
 1926-27—Jack Delaney (a)
 1927 —Mike McTigue
 1927-29—Tommy Loughran (a)
 1930-34—Maxie Rosenbloom
 1934-35—Bob Olin
 1935-39—John Henry Lewis (a)
 1939 —Melio Bettina
 1939-41—Billy Conn (a)
 1941-48—Gus Lesnevich
 1948—Freddie Mills
 (a) Abandoned title.

MIDDLEWEIGHT CHAMPIONS

- 1867-72—Tom Chandler (bare knuckles).
 1872-81—Geo. Rourke (bare knuckles and gloves)
 1881-82—Mike Donovan (r)
 1884-91—Jack (Nonpareil) Dempsey
 1891-97—Bob Fitzsimmons
 1897-1907—Tommy Ryan, Kid McCoy, Philadelphia Jack O'Brien (t)
 1907-08—Stanley Ketchel
 1908 —Billy Papke
 1908-10—Stanley Ketchel
 1910-13—Billy Papke
 1913 —Frank Klaus
 1913-14—George Chip
 1914-17—Al McCoy
 1917-20—Mike O'Dowd
 1920-23—Johnny Wilson
 1923-26—Harry Greb
 1926 —Tiger Flowers
 1926-31—Mickey Walker (a)
 1931-32—Gorilla Jones (NBA); Ben Jeby (N. Y. Comm.)
 1932-37—Marcel Thil*
 1938 —Al Hostak and Solly Krieger (NBA)
 1939 —Solly Krieger, Al Hostak (NBA); Ceferino Garcia (N. Y. Comm.)
 1940 —Tony Zale (NBA); Ken Overlin (N. Y. Comm.)
 1941 —Tony Zale (NBA); Billy Soose (N. Y. Comm.)†
 1941-47—Tony Zale
 1947-48—Rocky Graziano
 1948 Tony Zale, Marcel Cerdan

(r) Retired. (t) Title claimants. (a) Abandoned title. *Thil's victory on a foul over Jones gave him a clear title claim, but the New York Commission withheld recognition. At various times during the 1932-37 period, championship recognition by the different bodies was given to the following: Ben Jeby, Lou Brouillard, Vince Dundee, Teddy Yarosz, Babe Risko, and Freddy Steele. Fred Apostoli knocked out Thil in 10 rounds at the Polo Grounds, Sept. 23, 1937, but did not claim the title because of an agreement made with Thil. This was Thil's last fight. †Soose abandoned his claim to the title and Zale became the undisputed champion by defeating Georgie Abrams, who had beaten Soose three times.

WELTERWEIGHT CHAMPIONS

- 1892-94—Mysterious Billy Smith
 1894-96—Tommy Ryan
 1896 —Kid McCoy (o)
 1900 —Rube Ferns, Matty Matthews
 1901 —Rube Ferns
 1901-06—Joe Walcott*
 1906-07—Honey Mellody

- 1907 —Mike (Twin) Sullivan†
 1915 —Ted Lewis†
 1919-22—Jack Britton
 1922-26—Mickey Walker
 1926-27—Pete Latzo
 1927-29—Joe Dundee
 1929-30—Jackie Fields
 1930 —Young Jack Thompson
 1930-31—Tommy Freeman
 1931 —Young Jack Thompson
 1931-32—Lou Brouillard
 1932-33—Jackie Fields
 1933 —Young Corbett 3d
 1933-34—Jimmy McLarnin
 1934 —Barney Ross
 1934-35—Jimmy McLarnin
 1935-38—Barney Ross
 1938-40—Henry Armstrong
 1940-41—Fritz Zivic
 1941-46—Freddie Cochrane
 1946-47—Marty Servo (r), Ray Robinson
 1947—Ray Robinson

(o) Outgrew class. *Walcott lost on foul to Dixie Kid in 1904, but decision was disputed. Dixie Kid went abroad, outgrew class, and Walcott was again recognized as the champion. †Sullivan outgrew class. The title was claimed by Jimmy Gardner, Jimmy Clabby, Ray Bronson, Clarence (Kid) Ferns, Mike Gibbons, Kid Graves, Mike Glover, Ted Lewis, and Jack Britton but no one received recognition as titleholder until Ted Lewis established his claim in 1915. †Lewis outpointed Britton to gain undisputed possession of the crown on Aug. 31, 1915, and fought Britton a number of times over a period of four years with varying results until March 17, 1919, when Britton became the undisputed titleholder by knocking out Lewis. (r) Retired.

LIGHTWEIGHT CHAMPIONS

- 1885-96—Jack McAuliffe*
 1896-99—Kid Lavigne
 1899-02—Frank Erna
 1902-08—Joe Gans
 1908-10—Battling Nelson
 1910-12—Ad Wolgast
 1912-14—Willie Ritchie
 1914-17—Freddy Welsh
 1917-25—Benny Leonard (r)
 1925 —Jimmy Goodrich
 1925-26—Rocky Kansas
 1926-30—Sammy Mandell
 1930 —Al Singer
 1930-33—Tony Canzoneri
 1933-35—Barney Ross
 1935-36—Tony Canzoneri
 1936-38—Lou Ambers
 1938-39—Henry Armstrong
 1939-40—Lou Ambers
 1940-41—Lew Jenkins
 1941-42—Sammy Angott†
 1943 —Beau Jack, Bob Montgomery (N. Y. Comm.), Sammy Angott (NBA).
 1944 —Beau Jack, Bob Montgomery (N. Y. Comm.), Sammy Angott, Juan Zurita (NBA).
 1945 —Bob Montgomery (N. Y. Comm.), Juan Zurita, Ike Williams (NBA).
 1946-47—Bob Montgomery (N. Y. Comm.), Ike Williams (NBA).
 1947—Ike Williams

*McAuliffe was champion of America, but never held the world crown, his battle for the world title with Jem Carney of England in 1887 resulting in a 74-round draw. (r) Retired. †Angott announced his retirement on Nov. 13, 1942, leaving the title vacant, but approximately two months later announced his comeback as challenger for the crown.

FEATHERWEIGHT CHAMPIONS

- 1889 —Freddie Bogan
 1890 —Billy Murphy
 1892-1900—George Dixon
 1900-01—Terry McGovern
 1901 —Young Corbett (o)
 1904-08—Brooklyn Tommy Sullivan
 1908-12—Abe Attell
 1912-23—Johnny Kilbane
 1923 —Eugene Criqui
 1923-25—Johnny Dundee (o)
 1925-27—Louis (Kid) Kaplan (o)
 1927-28—Benny Bass
 1928 —Tony Canzoneri
 1928-29—Andre Routis
 1929-32—Battling Battalino (o)
 1932 —Tommy Paul (NYA); Kid Chocolate (N. Y. Comm.).
 1933-36—Freddie Miller
 1936-37—Petey Sarron
 1937-38—Henry Armstrong (a)
 1938-40—Joey Archibald
 1940-41—Harry Jeffra, Joey Archibald
 1941-42—Chalky Wright
 1942-48—Willie Pep
 1948 —Sandy Saddler
 (o)Outgrew class. (a)Abandoned title.

FLYWEIGHT CHAMPIONS

- 1916-23—Jimmy Wilde
 1923-25—Pancho Villa*
 1925 —Frankie Genaro
 1925-27—Fidel La Barba (r)
 1927 —Corporal Izzy Schwartz†
 1930 —Midget Wolgast (N. Y. Comm.); Frankie Genaro (NBA).
 1931-32—Young Perez‡
 1932-35—Jackie Brown
 1935-38—Benny Lynch (r)
 1939 —Peter Kane (a)
 1943-47—Jackie Paterson (d)
 1947—Rinty Monaghan
 *Villa died in 1925, Genaro claiming title. †Schwartz was recognized as champion by N. Y. Comm., but conditions in the class became confused and were not straightened out until an elimination tourney was held in November, 1929. ‡Perez was recognized as world's champion by the International Boxing Union of Europe. (r)Retired. (a)Abandoned title. (d)Deprived of title.

NATIONAL A. A. U. CHAMPIONS, 1948

- 12 LB.—Frank Sodano, Philadelphia
 18 LB.—Bill Morgan, Newark, N. J.
 26 LB.—Teddy Fittipaldo, Warren, Ohio
 35 LB.—Johnny Gonsalves, Oakland, Calif.
 47 LB.—Eugene Linscott, Grand Rapids, Mich.
 50 LB.—Raymond Bryan, New York
 75 LB.—Grant Butcher, San Francisco
 HEAVYWEIGHT—Coley Wallace, New York
 TEAM—New York

BANTAMWEIGHT CHAMPIONS

- 1890-92—George Dixon (o)
 1894-99—Jimmy Barry (r)
 1899-1900—Terry McGovern (o),
 1901 —Harry Harris (o)
 1902-03—Harry Forbes
 1903-04—Frankie Neil
 1904 —Joe Bowker (o)
 1905-07—Jimmy Walsh (o)
 1910-14—Johnny Coulon
 1914-17—Kid Williams
 1917-20—Pete Herman
 1920-21—Joe Lynch
 1921 —Pete Herman
 1921-22—Johnny Buff
 1922-24—Joe Lynch
 1924 —Abe Goldstein
 1924-25—Eddie (Cannonball) Martin
 1925 —Charlie (Phil) Rosenberg (d)
 1929-35—Al Brown
 1935-36—Baltazar Sangchili
 1936 —Tony Marino
 1936-37—Sixto Escobar
 1937-38—Harry Jeffra
 1938-40—Sixto Escobar (r)
 1940-42—Lou Salica
 1942-47—Manuel Ortiz
 1947 —Harold Dade
 1947—Manuel Ortiz

(o)Outgrew class. (r)Retired. (d)Deprived of title when unable to make weight for championship bout.

Famous Firsts in Boxing

First modern ring champion: Jim Figg of England, 1719.

First set of boxing rules and first set of boxing gloves: Made by Jack Broughton, 1743.

First championship fight in America: Jacob Hyer beat Tom Beasley, 1816.

First glove fight: Between two English boxers, at Aix-la-Chapelle, France, October 8, 1818.

First contest in which motion pictures were filmed for general display to the public: Bob Fitzsimmons vs. Jim Corbett bout at Carson City, Nevada, 1897.

First million-dollar gate: Jack Dempsey vs. Georges Carpentier at Boyle's Thirty Acres, Jersey City, N. J., July 2, 1921 (\$1,789,238).

First fight broadcast: Dempsey vs. Carpentier, 1921, J. Andrew White announcer.

First fight to draw over 100,000 people: Jack Dempsey vs. Gene Tunney at Philadelphia, 1926 (120,757).

First fight on television: Eric Boon vs. Arthur Danahar, Harringay Arena, London, England, February 23, 1939.

Neil Memorial Award Winners

The Edward J. Neil Memorial Plaque is given annually by the Boxing Writers' Association of New York to the individual who has done the most to further the cause of the sport. The winners:

- | | |
|-----------------------|---------------------------------------------------------------------|
| 1938 Jack Dempsey | 1943 The boxers in all branches of the Armed Forces of our country. |
| 1939 Billy Conn | 1944 Lt. Comdr. Benny Leonard, U.S.M.S. |
| 1940 Henry Armstrong | 1945 James J. Walker |
| 1941 Joe Louis | 1946 Tony Zale |
| 1942 Sgt. Barney Ross | 1947 Gus Lesnevich |

Ring Record and Earnings of Joe Louis

Born, May 13, 1914, Lexington, Alabama. Weight, 213½ lb.
Height, 6 ft. 2 in.

1934

July 4	Jack Kracken, Chicago.....	KO 1
July 11	Willie Davis, Chicago.....	KO 3
July 29	Larry Udell, Chicago.....	KO 2
Aug. 13	Jack Kranz, Chicago.....	W 6
Aug. 27	Buck Everett, Chicago.....	KO 2
Sept. 11	Alex Borchuk, Detroit.....	KO 4
Sept. 25	Adolph Wiater, Chicago.....	W 10
Oct. 24	Art Sykes, Chicago.....	KO 8
Oct. 30	Jack O'Dowd, Detroit.....	KO 2
Nov. 14	Stanley Poreda, Chicago.....	KO 1
Nov. 30	Charley Massera, Chicago.....	KO 3
Dec. 14	Lee Ramage, Chicago.....	KO 8

1935

Jan. 4	Patsy Perroni, Detroit.....	W 10
Jan. 11	Hans Birkie, Pittsburgh.....	KO 10
Feb. 1	Lee Ramage, Los Angeles.....	KO 2
Mar. 8	Donald Barry, San Francisco.....	KO 3
Mar. 28	Natie Brown, Detroit.....	W 10
Apr. 13	Roy Lazer, Chicago.....	KO 3
Apr. 24	Biff Benton, Dayton.....	KO 2
Apr. 27	Roscoe Toles, Flint.....	KO 6
May 3	Willie Davis, Peoria.....	KO 2
May 5	Gus Stanton, Kalamazoo.....	KO 3
June 25	Primo Carnera, Yankee Stadium.....	KO 6
Aug. 7	King Levinsky, Chicago.....	KO 1
Sept. 24	Max Baer, Yankee Stadium.....	KO 4
Dec. 13	Paulino Uzcudun, Madison Square Garden.....	KO 4

1936

Jan. 17	Charley Retzlaff, Chicago.....	KO 1
June 19	Max Schmeling, Yankee Stadium.....	KO by 12
Aug. 17	Jack Sharkey, Yankee Stadium.....	KO 3
Sept. 22	Al Ettore, Philadelphia.....	KO 5
Oct. 9	Jorge Brescia, Madison Square Garden.....	KO 3
Dec. 14	Eddie Simms, Cleveland.....	KO 1

RECAPITULATION—bouts, 61; knockouts, 51; won decisions, 9; knocked out by, 1.

1934.....	\$ 4,757.00	1938.....	\$406,409.00	1942.....	\$111,082.00	1948.....	\$257,162.00
1935.....	429,655.00	1939.....	301,995.17	1946.....	741,727.44		
1936.....	281,838.00	1940.....	117,455.25	1947.....	75,968.00		
1937.....	253,262.00	1941.....	471,892.86			Total.....	\$3,533,203.72*

*Louis was inducted into the Army in 1942. Before his fight with Billy Conn on June 19, 1946, Louis' earnings from exhibitions while on furlough and since his discharge amounted to \$73,000. In 1946-47 Joe received approximately \$200,000 from exhibitions in the United States, Hawaii, Mexico, Cuba and South America. In the spring of 1948 Louis received \$80,000 for exhibition appearances in England. These amounts are included in the total compilation.

WORLD CHAMPIONSHIP FIGHTS IN 1948

Date	Winner	Loser	Title at stake	Where held	Rounds	Attendance
Feb. 24	Willie Pep.....	Humberto Sierra.....	Featherweight.....	Miami, Fla.....	KO 10.....	7,757
March 5	Gus Lesnevich.....	Billy Fox.....	Light heavyweight.....	New York.....	KO 1.....	18,453
March 23	Rinty Monaghan.....	Jackie Paterson.....	Flyweight.....	Belfast.....	KO 7.....	10,000
May 25	Ike Williams.....	Enrique Bolanos.....	Lightweight.....	Los Angeles.....	15.....	28,000
June 10	*Tony Zale.....	Rocky Graziano.....	Middleweight.....	Newark, N. J.....	KO 3.....	20,258
June 25	Joe Louis.....	Joe Walcott.....	Heavyweight.....	New York.....	KO 11.....	42,667
June 28	Ray Robinson.....	Bernard Docusen.....	Welterweight.....	Chicago.....	15.....	8,500
July 4	Manuel Ortiz.....	Memo Valero.....	Bantamweight.....	Mexicali, Mex.....	KO 8.....	11,152
July 12	Ike Williams.....	Beau Jack.....	Lightweight.....	Philadelphia.....	KO 6.....	12,952
July 26	*Freddie Mills.....	Gus Lesnevich.....	Light heavyweight.....	London.....	15.....	46,000
Sept. 21	Marcel Cerdan.....	Tony Zale.....	Middleweight.....	Jersey City.....	KO 12.....	19,272
Sept. 23	Ike Williams.....	Jesse Flores.....	Lightweight.....	New York.....	KO 10.....	15,413
Oct. 29	*Sandy Saddler.....	Willie Pep.....	Featherweight.....	New York.....	KO 4.....	14,581

*Won championship.

LAWN TENNIS

LAWN TENNIS is a comparatively modern modification of the ancient game of court tennis. Major Walter Clopton Wingfield thought that something like court tennis might be played outdoors on lawns and in December, 1873, at Nantclwyd, Wales, he introduced his new game under the name of *Sphairistike* at a lawn party. The game was a success and spread rapidly, but the name was a total failure and almost immediately disappeared when all the players and spectators began to refer to the new game as "lawn tennis". In the early part of 1874 a young lady named Mary Ewing Outerbridge returned from Bermuda to New York, bringing with her the implements and necessary equipment of the new game that she had obtained from a British Army supply store in Bermuda. Miss Outerbridge and friends played the first game of lawn tennis in the United States on the grounds of the Staten Island

Cricket and Baseball Club in the spring of 1874.

For a few years the new game went along in haphazard fashion under varying rules. Tennis balls were of no standard size or texture. The nets were set at different heights up to 5 feet on the side and 4 feet in the middle. Some courts were marked out in hour-glass shape, narrow in the middle and wide at both ends. But about 1880 standard measurements for the court and standard equipment within definite limits became the rule. In 1881 the United States Lawn Tennis Association was formed and conducted the first national championship at Newport, R. I. The international matches for the Davis Cup began with a series between the British and United States players on the courts of the Longwood Cricket Club, Chestnut Hill, Mass., in 1900, with the home players winning.

Lawn Tennis Statistics

Source: *The Official Tennis Guide*; published by A. S. Barnes & Co.

DAVIS CUP CHALLENGE ROUND RESULTS

No matches in 1901, 1910, 1915-18, and 1940-45.

Year	Result	Where played	Year	Result	Where played
1900	United States 5, British Isles 0	Chestnut Hill	1925	United States 5, France 0	Philadelphia
1902	United States 3, British Isles 2	Brooklyn	1926	United States 4, France 1	Philadelphia
1903	British Isles 4, United States 1	Chestnut Hill	1927	France 3, United States 2	Philadelphia
1904	British Isles 5, Belgium 0	Wimbledon	1928	France 4, United States 1	Paris
1905	British Isles 5, United States 0	Wimbledon	1929	France 3, United States 2	Paris
1906	British Isles 5, United States 0	Wimbledon	1930	France 4, United States 1	Paris
1907	Australasia 3, British Isles 2	Wimbledon	1931	France 3, Great Britain 2	Paris
1908	Australasia 3, United States 2	Melbourne	1932	France 3, United States 2	Paris
1909	Australasia 5, United States 0	Sydney	1933	Great Britain 3, France 2	Paris
1911	Australasia 5, United States 0	Christchurch	1934	Great Britain 4, United States 1	Wimbledon
1912	British Isles 3, Australasia 2	Melbourne	1935	Great Britain 5, United States 0	Wimbledon
1913	United States 3, British Isles 2	Wimbledon	1936	Great Britain 3, Australia 2	Wimbledon
1914	Australasia 3, United States 2	Forest Hills	1937	United States 4, Great Britain 1	Wimbledon
1919	Australasia 4, British Isles 1	Sydney	1938	United States 3, Australia 2	Philadelphia
1920	United States 5, Australasia 0	Auckland	1939	Australia 3, United States 2	Haverford
1921	United States 5, Japan 0	Forest Hills	1946	United States 5, Australia 0	Melbourne
1922	United States 4, Australasia 1	Forest Hills	1947	United States 4, Australia 1	Forest Hills
1923	United States 4, Australasia 1	Forest Hills	1948	United States 5, Australia 0	Forest Hills
1924	United States 5, Australasia 0	Philadelphia			

WIGHTMAN CUP RECORD

WOMEN

Year	Result	Where played	Year	Result	Where played
1923	United States 7, England 0	Forest Hills	1934	United States 5, England 2	Wimbledon
1924	England 6, United States 1	Wimbledon	1935	United States 4, England 3	Forest Hills
1925	England 4, United States 3	Forest Hills	1936	United States 4, England 3	Wimbledon
1926	United States 4, England 3	Wimbledon	1937	United States 6, England 1	Forest Hills
1927	United States 5, England 2	Forest Hills	1938	United States 5, England 2	Wimbledon
1928	England 4, United States 3	Wimbledon	1939	United States 5, England 2	Forest Hills
1929	United States 4, England 3	Forest Hills	1940-45	No matches	
1930	England 4, United States 3	Wimbledon	1946	United States 7, England 0	Wimbledon
1931	United States 5, England 2	Forest Hills	1947	United States 7, England 0	Forest Hills
1932	United States 4, England 3	Wimbledon	1948	United States 6 England 1	Wimbledon
1933	United States 4, England 3	Forest Hills			

UNITED STATES CHAMPIONS

Men's Singles

1881 Richard D. Sears	1898 Malcolm D. Whitman	1915 William Johnston	1932 H. Ellsworth Vines, Jr.
1882 Richard D. Sears	1899 Malcolm D. Whitman	1916 R. N. Williams, II	1933 Fred J. Perry
1883 Richard D. Sears	1900 Malcolm D. Whitman	1917 R. Lindley Murray†	1934 Fred J. Perry
1884 Richard D. Sears	1901 William A. Larned	1918 R. Lindley Murray	1935 Wilmer L. Allison
1885 Richard D. Sears	1902 William A. Larned	1919 William Johnston	1936 Fred J. Perry
1886 Richard D. Sears	1903 Hugh L. Doherty	1920 William T. Tilden, II	1937 J. Donald Budge
1887 Richard D. Sears	1904 Holcombe Ward	1921 William T. Tilden, II	1938 J. Donald Budge
1888 Henry W. Slocum, Jr.	1905 Beals C. Wright	1922 William T. Tilden, II	1939 Robert L. Riggs
1889 Henry W. Slocum, Jr.	1906 William J. Clothier	1923 William T. Tilden, II	1940 Donald McNeill
1890 Oliver S. Campbell	1907 William A. Larned	1924 William T. Tilden, II	1941 Robert L. Riggs
1891 Oliver S. Campbell	1908 William A. Larned	1925 William T. Tilden, II	1942 Frederick R. Schroeder, Jr.
1892 Oliver S. Campbell	1909 William A. Larned	1926 Jean Rene Lacoste	1943 Lt. (jg) Joseph R. Hunt
1893 Robert D. Wrenn	1910 William A. Larned	1927 Jean Rene Lacoste	1944 Sgt. Frank A. Parker
1894 Robert D. Wrenn	1911 William A. Larned	1928 Henri Cochet	1945 Sgt. Frank A. Parker
1895 Fred H. Hovey	1912 Maurice E. McLoughlin*	1929 William T. Tilden, II	1946 John A. Kramer
1896 Robert D. Wrenn	1913 Maurice E. McLoughlin	1930 John H. Doeg	1947 John A. Kramer
1897 Robert D. Wrenn	1914 R. N. Williams, II	1931 H. Ellsworth Vines, Jr.	1948 Richard Gonzales

*Challenge round abandoned. †Patriotic tourney.

Men's Doubles

1881 C. M. Clark—F. W. Taylor	1915 William Johnston—C. J. Griffin
1882 R. D. Sears—James Dwight	1916 William Johnston—C. J. Griffin
1883 R. D. Sears—James Dwight	1917 F. B. Alexander—H. A. Throckmorton*
1884 R. D. Sears—James Dwight	1918 W. T. Tilden, II—Vincent Richards†
1885 R. D. Sears—J. S. Clark	1919 N. E. Brookes—G. L. Patterson
1886 R. D. Sears—James Dwight	1920 William Johnston—C. J. Griffin
1887 R. D. Sears—James Dwight	1921 W. T. Tilden, II—Vincent Richards
1888 O. S. Campbell—V. G. Hall	1922 W. T. Tilden, II—Vincent Richards
1889 H. W. Slocum, Jr.—H. J. A. Taylor	1923 W. T. Tilden, II—B. I. C. Norton
1890 V. G. Hall—Clarence Hobart	1924 H. O. Kinsey—R. G. Kinsey
1891 O. S. Campbell—R. P. Huntington, Jr.	1925 Vincent Richards—R. N. Williams, II
1892 O. S. Campbell—R. P. Huntington, Jr.	1926 Vincent Richards—R. N. Williams, II
1893 Clarence Hobart—F. H. Hovey	1927 W. T. Tilden, II—F. T. Hunter
1894 Clarence Hobart—F. H. Hovey	1928 G. M. Lott, Jr.—J. F. Hennessey
1895 M. G. Chace—R. D. Wrenn	1929 G. M. Lott, Jr.—J. H. Doeg
1896 C. B. Neel—S. R. Neel	1930 G. M. Lott, Jr.—J. H. Doeg
1897 L. E. Ware—G. P. Sheldon, Jr.	1931 W. L. Allison—John Van Ryn
1898 L. E. Ware—G. P. Sheldon, Jr.	1932 H. E. Vines, Jr.—Keith Gladhill
1899 Holcombe Ward—D. F. Davis	1933 G. M. Lott, Jr.—L. R. Stofen
1900 Holcombe Ward—D. F. Davis	1934 G. M. Lott, Jr.—L. R. Stofen
1901 Holcombe Ward—D. F. Davis	1935 W. L. Allison—John Van Ryn
1902 R. F. Doherty—H. L. Doherty	1936 J. D. Budge—C. G. Mako
1903 R. F. Doherty—H. L. Doherty	1937 Baron G. von Cramm—Henner Henkel
1904 Holcombe Ward—B. C. Wright	1938 J. D. Budge—C. G. Mako
1905 Holcombe Ward—B. C. Wright	1939 A. K. Quist—J. E. Bromwich
1906 Holcombe Ward—B. C. Wright	1940 J. A. Kramer—F. R. Schroeder, Jr.
1907 H. H. Hackett—F. B. Alexander	1941 J. A. Kramer—F. R. Schroeder, Jr.
1908 H. H. Hackett—F. B. Alexander	1942 Lt. (jg) Gardnar Mulloy—W. F. Talbert
1909 H. H. Hackett—F. B. Alexander	1943 J. A. Kramer—Cpl. F. A. Parker
1910 H. H. Hackett—F. B. Alexander	1944 Lt. W. D. McNeil—a/c Robert Falkenburg
1911 R. D. Little—G. F. Touchard	1945 Lt. Gardnar Mulloy—W. F. Talbert
1912 M. E. McLoughlin—T. C. Bundy	1946 Gardnar Mulloy—W. F. Talbert
1913 M. E. McLoughlin—T. C. Bundy	1947 J. A. Kramer—F. R. Schroeder, Jr.
1914 M. E. McLoughlin—T. C. Bundy	1948 Gardnar Mulloy—W. F. Talbert

*Patriotic tournament. †Challenge round abandoned.

DAVIS CUP FINAL, 1948

(At Forest Hills, N. Y., Sept. 4, 5 and 6)

United States 5, Australia 0

SINGLES—Ted Schroeder beat Adrian Quist, 6-3, 4-6, 6-0, 6-0; Frank Parker beat Billy Sidwell, 6-4, 6-4, 6-4; Schroeder beat Sidwell, 6-2, 6-1, 6-1; Parker beat Quist, 6-2, 6-2, 6-3.

DOUBLES—William Talbert and Gardnar Mulloy beat Colin Long and Sidwell, 8-6, 9-7, 2-6, 7-5.

U. S. PROFESSIONAL CHAMPIONS, 1948

SINGLES—Jack Kramer, Los Angeles

DOUBLES—Francisco Segura, Ecuador-Jack Kramer

WIGHTMAN CUP SUMMARY, 1948

United States 6, England 1

SINGLES—Mrs. Margaret Osborne du Pont, United States, beat Mrs. Jean Bostock, 6-4, 8-6; Louise Brough, United States, beat Mrs. Betty Hilton, 6-3, 6-4; Doris Hart, United States, beat Joy Gannon, 6-1, 6-4; Mrs. du Pont beat Mrs. Hilton, 6-3, 6-4; Miss Brough beat Mrs. Hilton, 6-1, 6-1.

DOUBLES—Mrs. Bostock—Mrs. Molly Blair, England, beat Mrs. Patricia Canning Todd—Miss Hart, 6-3, 6-4; Miss Brough—Mrs. du Pont beat Mrs. Hilton—Mrs. Kay Stammers Menzies, 6-2, 6-2.

Women's Singles

1887 Ellen F. Hansell	1903 Elisabeth H. Moore	1919 Mrs. George W. Wightman	1934 Helen Jacobs
1888 Bertha L. Townsend	1904 May G. Sutton	1920 Mrs. Franklin I. Mallory	1935 Helen Jacobs
1889 Bertha L. Townsend	1905 Elisabeth H. Moore	1921 Mrs. Franklin I. Mallory	1936 Alice Marble
1890 Ellen C. Roosevelt	1906 Helen Homans	1922 Mrs. Franklin I. Mallory	1937 Anita Lizana
1891 Mabel E. Cahill	1907 Evelyn Sears	1923 Helen N. Wills	1938 Alice Marble
1892 Mabel E. Cahill	1908 Mrs. Maud Bargar-Wallach	1924 Helen N. Wills	1939 Alice Marble
1893 Aline M. Terry	1909 Hazel V. Hotchkiss	1925 Helen N. Wills	1940 Alice Marble
1894 Helen R. Helwig	1910 Hazel V. Hotchkiss	1926 Mrs. Franklin I. Mallory	1941 Mrs. Sarah P. Cooke
1895 Juliette P. Atkinson	1911 Hazel V. Hotchkiss	1927 Helen N. Wills	1942 Pauline M. Betz
1896 Elisabeth H. Moore	1912 Mary K. Browne	1928 Helen N. Wills	1943 Pauline M. Betz
1897 Juliette P. Atkinson	1913 Mary K. Browne	1929 Helen N. Wills	1944 Pauline M. Betz
1898 Juliette P. Atkinson	1914 Mary K. Browne	1930 Betty Nuthall	1945 Mrs. Sarah P. Cooke
1899 Marion Jones	1915 Molla Bjurstedt	1931 Mrs. Helen W. Moody	1946 Pauline M. Betz
1900 Myrtle McAteer	1916 Molla Bjurstedt	1932 Helen Jacobs	1947 A. Louise Brough
1901 Elisabeth H. Moore	1917 Molla Bjurstedt*	1933 Helen Jacobs	1948 Margaret du Pont
1902 Marion Jones	1918 Molla Bjurstedt†		

*Louise Hammond won patriotic tourney. †Challenge round abandoned.

Women's Doubles

1890 Ellen C. Roosevelt—Grace W. Roosevelt	1920 Marion Zinderstein—Eleanor Goss
1891 Mabel E. Cahill—Mrs. W. F. Morgan	1921 Mary K. Browne—Mrs. R. H. Williams
1892 Mabel E. Cahill—A. M. McKinley	1922 Mrs. J. B. Jessup—Helen N. Wills
1893 Aline M. Terry—Hattie Butler	1923 Kathleen McKane—Mrs. B. C. Covell
1894 Helen R. Helwig—J. P. Atkinson	1924 Mrs. G. W. Wightman—Helen N. Wills
1895 Helen R. Helwig—J. P. Atkinson	1925 Mary K. Browne—Helen N. Wills
1896 E. H. Moore—J. P. Atkinson	1926 Elizabeth Ryan—Eleanor Goss
1897 J. P. Atkinson—Kathleen Atkinson	1927 Mrs. L. A. Godfree—Ermyntude Harvey
1898 J. P. Atkinson—Kathleen Atkinson	1928 Mrs. G. W. Wightman—Helen N. Wills
1899 Jane W. Craven—Myrtle McAteer	1929 Mrs. Phoebe Watson—Mrs. L. R. C. Michell
1900 Edith Parker—Hallie Champlin	1930 Betty Nuthall—Sarah Palfrey
1901 J. P. Atkinson—Myrtle McAteer	1931 Betty Nuthall—Mrs. E. B. Whittingstall
1902 J. P. Atkinson—Marion Jones	1932 Helen Jacobs—Sarah Palfrey
1903 E. H. Moore—Carrie B. Neely	1933 Betty Nuthall—Freda James
1904 May G. Sutton—Miriam Hall	1934 Helen Jacobs—Sarah Palfrey
1905 Helen Homans—Carrie B. Neely	1935 Helen Jacobs—Mrs. S. P. Fabyan
1906 Mrs. L. S. Coe—Mrs. D. S. Platt	1936 Mrs. M. G. Van Ryn—Carolyn Babcock
1907 Marie Weimer—Carrie B. Neely	1937 Mrs. S. P. Fabyan—Alice Marble
1908 Evelyn Sears—Margaret Curtis	1938 Mrs. S. P. Fabyan—Alice Marble
1909 Hazel V. Hotchkiss—Edith E. Rotch	1939 Mrs. S. P. Fabyan—Alice Marble
1910 Hazel V. Hotchkiss—Edith E. Rotch	1940 Mrs. S. P. Fabyan—Alice Marble
1911 Hazel V. Hotchkiss—Eleanora Sears	1941 Mrs. S. P. Cooke—Margaret Osborne
1912 Dorothy Green—Mary K. Browne	1942 A. Louise Brough—Margaret Osborne
1913 Mary K. Browne—Mrs. R. H. Williams	1943 A. Louise Brough—Margaret Osborne
1914 Mary K. Browne—Mrs. R. H. Williams	1944 A. Louise Brough—Margaret Osborne
1915 Mrs. G. W. Wightman—Eleanora Sears	1945 A. Louise Brough—Margaret Osborne
1916 Molla Bjurstedt—Eleanora Sears	1946 A. Louise Brough—Margaret Osborne
1917 Molla Bjurstedt—Eleanora Sears	1947 A. Louise Brough—Margaret Osborne
1918 Marion Zinderstein—Eleanor Goss	1948 A. Louise Brough—Margaret du Pont
1919 Marion Zinderstein—Eleanor Goss	

OTHER UNITED STATES CHAMPIONS, 1948

Singles

VETERANS'—J. Gilbert Hall, New York
WOMEN VETERANS'—Mrs. Mabel Bostonick, New York

Doubles

MIXED—Tom Brown, San Francisco—A. Louise Brough, Beverly Hills, Calif.
FATHER AND SON—Arthur C. Neilson, Sr.—Arthur C. Neilson, Jr., Chicago

VETERANS'—Mel Gallagher—John E. Woodall, Los Angeles
WOMEN VETERANS'—Mrs. Hazel Hotchkiss Wightman—Mrs. Marion Jessup, Brookline, Mass.

Clay Courts

SINGLES—Richard Gonzales, Los Angeles
WOMEN'S SINGLES—Mme. Magda Rurac, Bucharest, Rumania
DOUBLES—Sam Match, San Francisco—Tom Chambers, Los Angeles

Indoor

SINGLES—William F. Talbert, New York
WOMEN'S SINGLES—Mrs. Patricia C. Todd, La Jolla, Calif.
DOUBLES—Jean Borotra—Marcel Bernard, France
WOMEN'S DOUBLES—Doris Hart—Barbara Scofield, Miami U. (Fla.)
MIXED DOUBLES—William F. Talbert—Doris Hart

Public Parks

SINGLES—Willis Anderson, Los Angeles
WOMEN'S SINGLES—Mrs. Mary A. Prentiss, San Bernardino, Calif.
DOUBLES—Myron McNamara—Nolan McQuown, San Fernando, Calif.
WOMEN'S DOUBLES—Mrs. Mary A. Prentiss—Alice Wane, San Bernardino, Calif.
MIXED DOUBLES—Mrs. Mary A. Prentiss—Clyde Hippenstiel, San Bernardino, Calif.

BRITISH LAWN TENNIS CHAMPIONS

Men's Singles

1877 S. W. Gore	1893 J. Pin	1909 A. W. Gore	1928 R. Lacoste
1878 P. F. Hadow	1894 J. Pin	1910 A. F. Wilding	1929 H. Cochet
1879 J. T. Hartley	1895 W. Baddeley	1911 A. F. Wilding	1930 W. T. Tilden, II
1880 J. T. Hartley	1896 H. S. Mahony	1912 A. F. Wilding	1931 S. B. Wood
1881 W. Renshaw	1897 R. F. Doherty	1913 A. F. Wilding	1932 H. E. Vines, Jr.
1882 W. Renshaw	1898 R. F. Doherty	1914 N. E. Brookes	1933 J. H. Crawford
1883 W. Renshaw	1899 R. F. Doherty	1915-18 No tournaments	1934 F. J. Perry
1884 W. Renshaw	1900 R. F. Doherty	1919 G. L. Patterson	1935 F. J. Perry
1885 W. Renshaw	1901 A. W. Gore	1920 W. T. Tilden, II	1936 F. J. Perry
1886 W. Renshaw	1902 H. L. Doherty	1921 W. T. Tilden, II	1937 J. D. Budge
1887 H. F. Lawford	1903 H. L. Doherty	1922 G. L. Patterson*	1938 J. D. Budge
1888 E. Renshaw	1904 H. L. Doherty	1923 W. M. Johnston	1939 R. L. Riggs
1889 W. Renshaw	1905 H. L. Doherty	1924 J. Borotra	1940-45 No tournaments
1890 W. J. Hamilton	1906 H. L. Doherty	1925 R. Lacoste	1946 Yvon Petra
1891 W. Baddeley	1907 N. E. Brookes	1926 J. Borotra	1947 John A. Kramer
1892 W. Baddeley	1908 A. W. Gore	1927 H. Cochet	1948 R. Falkenburg

*Challenge round abandoned.

Men's Doubles

1879 L. R. Erskine—M. F. Lawford	1899 R. F. Doherty—H. L. Doherty	1923 R. Lycett—L. A. Godfree
1880 W. Renshaw—E. Renshaw	1900 R. F. Doherty—H. L. Doherty	1924 V. Richards—F. T. Hunter
1881 W. Renshaw—E. Renshaw	1901 R. F. Doherty—H. L. Doherty	1925 J. Borotra—R. Lacoste
1882 J. T. Hartley—R. T. Richardson	1902 S. H. Smith—F. L. Riseley	1926 H. Cochet—J. Brugnon
1883 C. W. Grinstead—C. E. Welldon	1903 R. F. Doherty—H. L. Doherty	1927 W. T. Tilden, II—F. T. Hunter
1884 W. Renshaw—E. Renshaw	1904 R. F. Doherty—H. L. Doherty	1928 H. Cochet—J. Brugnon
1885 W. Renshaw—E. Renshaw	1905 R. F. Doherty—H. L. Doherty	1929 W. Allison—J. Van Ryn
1886 W. Renshaw—E. Renshaw	1906 S. H. Smith—F. L. Riseley	1930 W. Allison—J. Van Ryn
1887 P. Bowes-Lyon—H. W. W. Wilberforce	1907 N. E. Brookes—A. F. Wilding	1931 G. M. Lott—J. Van Ryn
1888 W. Renshaw—E. Renshaw	1908 A. F. Wilding—M. J. G. Ritchie	1932 J. Borotra—J. Brugnon
1889 W. Renshaw—E. Renshaw	1909 A. W. Gore—H. R. Barrett	1933 J. Borotra—J. Brugnon
1890 J. L. Pim—F. O. Stoker	1910 A. F. Wilding—M. J. G. Ritchie	1934 G. M. Lott—L. R. Stoefen
1891 W. Baddeley—H. Baddeley	1911 M. Decugis—A. H. Gobert	1935 J. H. Crawford—A. K. Quist
1892 H. S. Barlow—E. W. Lewis	1912 H. R. Barrett—C. P. Dixon	1936 C. R. D. Tuckey—G. P. Hughes
1893 J. L. Pim—F. O. Stoker	1913 H. R. Barrett—C. P. Dixon	1937 J. D. Budge—C. Gene Mako
1894 W. Baddeley—H. Baddeley	1914 N. E. Brookes—A. F. Wilding	1938 J. D. Budge—C. Gene Mako
1895 W. Baddeley—H. Baddeley	1915-18 No tournaments	1939 R. L. Riggs—E. T. Cooke
1896 W. Baddeley—H. Baddeley	1919 R. V. Thomas—P. O'Hara Wood	1940-45 No tournaments
1897 R. F. Doherty—H. L. Doherty	1920 R. N. Williams, II—C. S. Garland	1946 J. A. Kramer—Tom Brown
1898 R. F. Doherty—H. L. Doherty	1921 R. Lycett—M. Woosnam	1947 J. A. Kramer—R. Falkenburg
	1922 R. Lycett—J. O. Anderson*	1948 J. Bromwich—F. Sedgman

*Challenge round abandoned.

Women's Singles

1884 M. Watson	1899 Mrs. Hillyard	1913 Mrs. L. Chambers	1930 Mrs. F. S. Moody
1885 M. Watson	1900 Mrs. Hillyard	1914 Mrs. L. Chambers	1931 Frl. C. Aussen
1886 Miss Bingley	1901 Mrs. Sterry	1915-18 No tournaments	1932 Mrs. F. S. Moody
1887 L. Dod	1902 M. E. Robb	1919 Mlle. Lenglen	1933 Mrs. F. S. Moody
1888 L. Dod	1903 Miss Douglas	1920 Mlle. Lenglen	1934 D. E. Round
1889 Mrs. Hillyard	1904 Miss Douglas	1921 Mlle. Lenglen	1935 Mrs. F. S. Moody
1890 L. Rice	1905 M. Sutton	1922 Mlle. Lenglen	1936 H. H. Jacobs
1891 L. Dod	1906 Miss Douglas	1923 Mlle. Lenglen	1937 D. E. Round
1892 L. Dod	1907 M. Sutton	1924 K. McKane	1938 Mrs. F. S. Moody
1893 L. Dod	1908 Mrs. Sterry	1925 Mlle. Lenglen	1939 A. Marble
1894 Mrs. Hillyard	1909 D. Boothby	1926 Mrs. Godfree	1940-45 No tournaments
1895 C. Cooper	1910 Mrs. L. Chambers	1927 H. Wills	1946 Pauline M. Betz
1896 C. Cooper	1911 Mrs. L. Chambers	1928 H. Wills	1947 Margaret Osborne
1897 Mrs. Hillyard	1912 Mrs. Larcombe	1929 H. Wills	1948 A. Louise Brough
1898 C. Cooper			

Women's Doubles

1913 Mrs. McNair—Miss Boothby	1926 Miss Ryan—M. K. Browne	1935 K. E. Stammers—F. James
1914 Miss Ryan—A. M. Morton	1927 Miss Ryan—H. Wills	1936 K. E. Stammers—F. James
1915-18 No tournaments	1928 Mrs. H. Watson—P. Saunders	1937 Mme. S. Mathieu—A. M. Yorke
1919 Mlle. Lenglen—Miss Ryan	1929 Mrs. H. Watson—Mrs. Michell	1938 A. Marble—Mrs. S. P. Fabyan
1920 Mlle. Lenglen—Miss Ryan	1930 Miss Ryan—Mrs. F. S. Moody	1939 A. Marble—Mrs. S. P. Fabyan
1921 Mlle. Lenglen—Miss Ryan	1931 Mrs. Shepherd-Barron—Mrs. Muddford King	1940-45 No tournaments
1922 Mlle. Lenglen—Miss Ryan	1932 Mlle. D. Metaxa—Mlle. J. Sigart	1946 A. L. Brough—M. Osborne
1923 Mlle. Lenglen—Miss Ryan	1933 Miss Ryan—Mme. Mathieu	1947 Doris Hart—Mrs. Pat Todd
1924 Mrs. Wightman—H. Wills	1934 Miss Ryan—Mme. Mathieu	1948 A. L. Brough—Mrs. M. O. du Pont
1925 Mlle. Lenglen—Miss Ryan		

COURT TENNIS

Source: Allison Danzig, *The New York Times*.

National Champions

892	Richard D. Sears, Boston A.A.	1928-29	Hewitt Morgan, R. and T. Club
893	Fiske Warren, Boston A.A.	1930	Lord Aberdare, England
894-95	B. Spalding de Garmendia, R. and T. Club	1931-32	William C. Wright, Philadelphia
896	Lawrence M. Stockton, Boston A.A.	1933	James H. Van Alen, R. and T. Club
897	George R. Fearing, Jr., Boston A.A.	1934-37	Ogden Phipps, R. and T. Club
898-99	Lawrence M. Stockton, Boston A.A.	1938	James H. Van Alen, R. and T. Club
900	Eustace H. Miles, England	1939	Ogden Phipps, R. and T. Club
901-04	Joshua Crane, Boston A.A.	1940	James H. Van Alen, R. and T. Club
905	Charles E. Sands, R. and T. Club	1941	Alastair B. Martin, R. and T. Club
1906-17	Jay Gould, Philadelphia R. C.	1942-45	No tournaments
1918-19	No tournaments	1946	Robert Grant, III, R. and T. Club
1920-25	Jay Gould, Philadelphia R. C.	1947	E. M. Beals, Jr., Boston
1926	C. Suydam Cutting, R. and T. Club	1948	Ogden Phipps, Roslyn, N. Y.
1927	George Huband, England, and Chicago R. C.		

RACQUETS

Source: Allison Danzig, *The New York Times*.

National Champions

1890	B. Spalding de Garmendia, N. Y. Racquet Court	1916	S. G. Mortimer, R. and T. Club and Tuxedo
1891	B. Spalding de Garmendia, R. and T. Club	1917	C. C. Pell, R. and T. Club and Tuxedo
1892	J. S. Tooker, R. and T. Club, Boston A.A.	1918-19	No tournaments
1893-94	B. Spalding de Garmendia, R. and T. Club	1920-22	C. C. Pell, R. and T. Club and Tuxedo
1895	J. S. Tooker, R. and T. Club, Boston A.A.	1923	S. G. Mortimer, R. and T. Club and Tuxedo
1896-97	B. Spalding de Garmendia, R. and T. Club	1924-25	C. C. Pell, R. and T. Club and Tuxedo
1898	F. F. Rolland, Canada	1926	S. G. Mortimer, R. and T. Club and Tuxedo
1899	Quincy A. Shaw, Jr., Boston A.A.	1927-28	C. C. Pell, R. and T. Club and Tuxedo
1900	Eustace H. Miles, England	1929	H. D. Sheldon, R. and T. Club
1901	Quincy A. Shaw, Jr., Boston A.A.	1930	S. G. Mortimer, R. and T. Club and Tuxedo
1902	Clarence H. Mackay, R. and T. Club	1931-33	C. C. Pell, R. and T. Club and Tuxedo
1903	Payne Whitney, R. and T. Club	1934	E. M. Edwards, Philadelphia R. C.
1904	George H. Brooke, Philadelphia R. C.	1935	H. D. Sheldon, R. and T. Club
1905	Lawrence Waterbury, R. and T. Club	1936	E. M. Edwards, Philadelphia R. C.
1906	Percy D. Houghton, R. and T. Club	1937-39	Robert Grant, III, R. and T. Club
1907	Reginald Fincke, R. and T. Club	1940	Warren Ingersoll, III, Philadelphia R. C.
1908	Quincy A. Shaw, Jr., Boston T. and R. Club	1941	Robert Grant, III, R. and T. Club
1909	H. F. McCormick, University Club, Chicago	1942-45	No tournaments
1910	Quincy A. Shaw, Jr., Boston T. and R. Club	1946	Robert Grant, III, R. and T. Club
1911-12	Reginald Fincke, R. and T. Club	1947	J. Richards Leonard, R. and T. Club
1913-14	Lawrence Waterbury, R. and T. Club	1948	Robert Grant, III, New York
1915	C. C. Pell, R. and T. Club and Tuxedo		

Tuxedo (N. Y.) Gold Racquet Winners

1904	—M. S. Barger, R. and T. Club	1929-30	—C. C. Pell, R. and T. Club and Tuxedo
1905-07	—C. H. Mackay, R. and T. Club	1931	—S. G. Mortimer, R. and T. Club and Tuxedo
1908	—J. G. Douglas, R. and T. Club	1932-33	—C. C. Pell, R. and T. Club and Tuxedo
1909	—H. F. McCormick, Chicago Univ. Club	1934	—J. R. Leonard, R. and T. Club
1910	—G. C. Clark, R. and T. Club	1935	—H. B. Sheldon, R. and T. Club
1911-12	—J. G. Douglas, R. and T. Club	1936	—C. C. Pell, R. and T. Club and Tuxedo
1913	—H. F. McCormick, Chicago Univ. Club	1937-39	—R. Grant III, R. and T. Club
1914-17	—C. C. Pell, R. and T. Club and Tuxedo	1940	—J. R. Leonard, R. and T. Club
1918-20	No tournaments	1941	—R. Grant III, R. and T. Club
1921-23	—C. C. Pell, R. and T. Club and Tuxedo	1942-45	No tournaments
1924	—S. G. Mortimer, R. and T. Club and Tuxedo	1946-47	—R. Grant III, R. and T. Club
1925-27	—C. C. Pell, R. and T. Club and Tuxedo	1948	—J. R. Leonard, R. and T. Club
1928	—S. G. Mortimer, R. and T. Club and Tuxedo		

OTHER CHAMPIONS, 1948

Racquets
NATIONAL DOUBLES—J. Richards Leonard, New York—
 Malcolm Kirkbride, Boston
PELL CUP—Robert Grant 3d, New York
CANADIAN SINGLES—J. Richards Leonard, New York

CANADIAN DOUBLES—J. R. Leonard—Fred de Rham, N. Y.
Court Tennis
WORLD—Pierre Etchebaster, New York.
NATIONAL DOUBLES—Alastair B. Martin, Glen Head, N. Y.—
 Ogden Phipps, Roslyn, N. Y.

SQUASH RACQUETS

Source: United States Squash Racquets Association.

National Singles Champions

1907	John A. Miskey, Overbrook G. C.	1928	Herbert N. Rawlins, Jr., R. and T. Club, N. Y.
1908	John A. Miskey, Overbrook G. C.	1929	J. Lawrence Pool, Harvard Club, New York.
1909	W. L. Freeland, Germantown C. C.	1930	Herbert N. Rawlins, Jr., R. and T. Club, N. Y.
1910	John A. Miskey, Overbrook G. C.	1931	J. Lawrence Pool, Harvard Club, New York.
1911	F. S. White, Germantown C. C.	1932	Beekman Pool, Harvard University.
1912	Constantine Hutchins, Boston A. A.	1933	Beekman Pool, Harvard Club, New York.
1913	Mortimer L. Newhall, Germantown C. C.	1934	Neil J. Sullivan, Germantown C. C.
1914	Constantine Hutchins, Boston T. and R. Club.	1935	Donald Strachan, Philadelphia C. C.
1915	Stanley W. Pearson, Germantown C. C.	1936	Germain G. Glidden, Harvard University.
1916	Stanley W. Pearson, Germantown C. C.	1937	Germain G. Glidden, Harvard Club, New York.
1917	Stanley W. Pearson, Germantown C. C.	1938	Germain G. Glidden, Harvard Club, New York.
1918-19	No tournaments.	1939	Donald Strachan, Merion C. C.
1920	Charles C. Peabody, Union B. C., Boston.	1940	A. Willing Patterson, Philadelphia R. C.
1921	Stanley W. Pearson, Philadelphia R. C.	1941	Charles W. Brinton, Princeton University.
1922	Stanley W. Pearson, Philadelphia R. C.	1942	Charles W. Brinton, Princeton University.
1923	Stanley W. Pearson, Philadelphia R. C.	1943-45	No tournaments.
1924	Gerald Roberts, Bath Club, London.	1946	Charles W. Brinton, Philadelphia.
1925	W. Palmer Dixon, Harvard University.	1947	Charles W. Brinton, Philadelphia.
1926	W. Palmer Dixon, R. and T. Club, N. Y.	1948	Stanley Pearson, Jr., Philadelphia.
1927	Myles P. Baker, Boston A. A.		

Lapham International Trophy Record

Year	Result	Where played	Year	Result	Where played
1922	U. S. 11, Canada 2	Boston	1935	U. S. 11, Canada 4	Montreal
1923	U. S. 9, Canada 3	Toronto	1936	U. S. 10, Canada 2	Detroit
1924	U. S. 7½, England 6, Canada 1½	Philadelphia	1937	Canada 8, U. S. 7	Montreal
1925	U. S. 10, Canada 5	Montreal	1938	U. S. 13, Canada 2	Boston
1926	U. S. 13, Canada 2	New York	1939	Canada 11, U. S. 4	Toronto
1927	England 17½, U. S. 16½, Canada 11	Toronto	1940	Canada 10, U. S. 5	Hartford
1928	U. S. 14, Canada 1	Buffalo	1941	U. S. 8, Canada 7	Toronto
1929	Canada 8, U. S. 4	Hamilton	1942	U. S. 13, Canada 2	Rochester, N. Y.
1930	U. S. 8, Canada 1	Baltimore	1943	Canada 7, U. S. 5	Montreal
1931	Canada 6, U. S. 5	Quebec	1944	U. S. 12, Canada 3	New York
1932	U. S. 8, Canada 0	Hartford	1945	Canada 12, U. S. 3	Toronto
1933	Canada 11, U. S. 4	Toronto	1946	U. S. 13, Canada 2	Boston
1934	U. S. 10, Canada 1	Cedarhurst, N. Y.	1947	Canada 9, U. S. 6	Hamilton
			1948	U. S. 15, Canada 5	Hartford

Other Squash Racquets Champions, 1948

NATIONAL

DOUBLES—Stanley Pearson, Jr.—Charles Brinton, Phila.

INTERCOLLEGIATE—Diehl Mateer, Haverford

PROFESSIONAL—Al Ramsay, Cleveland

VETERANS—George Waring, Boston

TEAM—Philadelphia

WOMEN'S SINGLES—Cecile Bowes, Philadelphia.

WOMEN'S DOUBLES—Peggy Scott, Germantown (Pa.) Cricket Club—Mrs. Dudley Vail, Jr., New York

SQUASH TENNIS

National Champions

Year	Winner and club	Year	Winner and club
1911	Alfred Stillman, Harvard	1929	Rowland B. Haines, Columbia
1912	Alfred Stillman, Harvard	1930	Harry F. Wolf, New York A. C.
1913	George Whitney, Harvard	1931	Harry F. Wolf, New York A. C.
1914	Alfred Stillman, Harvard	1932	Harry F. Wolf, New York A. C.
1915	Eric S. Winston, Harvard	1933	Harry F. Wolf, New York A. C.
1916	Eric S. Winston, Harvard	1934	Harry F. Wolf, New York A. C.
1917	Eric S. Winston, Harvard	1935	Harry F. Wolf, New York A. C.
1918	Fillmore Van S. Hyde, Harvard	1936	Harry F. Wolf, New York A. C.
1919	John W. Appel, Jr., Harvard	1937	Harry F. Wolf, New York A. C.
1920	Auguste J. Cordier, Yale	1938	Harry F. Wolf, Montclair
1921	Fillmore Van S. Hyde, Harvard	1939	Harry F. Wolf, New York A. C.
1922	Thomas R. Coward, Yale	1940	Harry F. Wolf, New York A. C.
1923	R. Earl Fink, Crescent	1941	Joseph J. Lordi, New York A. C.
1924	Fillmore Van S. Hyde, Harvard	1942-45	No tournaments
1925	William Rand, Jr., Harvard	1946	Frank R. Hanson, Columbia
1926	Fillmore Van S. Hyde, Harvard	1947	Frederick B. Ryan, Jr., Yale
1927	Rowland B. Haines, Columbia	1948	H. Robert Reeve, Bayside T. C.
1928	Rowland B. Haines, Columbia		

GOLF

IT MAY BE that golf originated in Holland—historians believe it did—but certainly Scotland fostered the game and is famous for it. In fact, in 1457 the Scottish Parliament, disturbed because football and golf had lured young Scots from the more soldierly exercise of archery, passed an ordinance that "futeball and golf be utterly cryit down and nocht usit". James I and Charles I of the royal line of Stuarts were golf enthusiasts, whereby the game came to be known as "the royal and ancient game of golf".

The golf balls used in the early games were leather covered and stuffed with feathers. Clubs of all kinds were fashioned by hand to suit individual players. The great step in spreading the game came with the change from the feather ball to the gutta-percha ball about 1850, and in 1860 formal competition began with the establishment of an annual tournament for the British open championship. There are records of "golf clubs" in the United

States as far back as colonial days but no proof of actual play before John Reid and some friends laid out six holes on the Reid lawn in Yonkers, N. Y., in 1888 and played there with the golf balls and clubs brought over from Scotland by Robert Lockhart. This group then formed the St. Andrews Golf Club of Yonkers, and golf was established in this country.

However, it remained a rather sedate and almost aristocratic pastime until a 20-year-old ex-caddy, Francis Ouimet of Boston, defeated two great British professionals, Harry Vardon and Ted Ray, in the United States Open championship at Brookline, Mass., in 1913. This feat put the game and Francis Ouimet on the front pages of the newspapers and stirred a wave of enthusiasm for the sport. The greatest feat so far in golf history was that of Robert Tyre Jones, Jr. of Atlanta, Ga., in winning the British Open, the British Amateur, the U. S. Open and the U. S. Amateur titles in one year, 1930.

Golf Statistics

Source: United States Golf Association.

UNITED STATES OPEN CHAMPIONS

Year	Winner	Score	Where played	Year	Winner	Score	Where played
1895	Horace Rawlins.....	173	Newport	1921	James M. Barnes.....	289	Columbia
1896	James Foulis.....	152	Shinnecock Hills	1922	Gene Sarazen.....	288	Skokie
1897	Joe Lloyd.....	162	Chicago	1923	R. T. Jones, Jr. (a b)....	296	Inwood
1898*	Fred Herd.....	328	Myopia	1924	Cyril Walker.....	297	Oakland Hills
1899	Willie Smith.....	315	Baltimore	1925	W. Macfarlane (a).....	291	Worcester
1900	Harry Vardon.....	313	Chicago	1926	R. T. Jones, Jr. (a b)....	293	Scioto
1901	Willie Anderson (a).....	331	Myopia	1927	Tommy Armour (a).....	301	Oakmont
1902	L. Auchterlonie.....	307	Garden City	1928	Johnny Farrell (a).....	294	Olympia Fields
1903	Willie Anderson (a).....	307	Baltusrol	1929	R. T. Jones, Jr. (a b)....	294	Winged Foot
1904	Willie Anderson.....	303	Glen View	1930	R. T. Jones, Jr. (b)....	287	Interlachen
1905	Willie Anderson.....	314	Myopia	1931	Billy Burke (a).....	292	Inverness
1906	Alex Smith.....	295	Onwentsia	1932	Gene Sarazen.....	286	Fresh Meadow
1907	Alex Ross.....	302	Philadelphia	1933	John Goodman (b).....	287	North Shore
1908	Fred McLeod (a).....	322	Myopia	1934	Olin Dutra.....	293	Merion
1909	George Sargent.....	290	Englewood	1935	Sam Parks, Jr.....	299	Oakmont
1910	Alex Smith (a).....	298	Philadelphia	1936	Tony Manero.....	282	Baltusrol
1911	J. J. McDermott (a).....	307	Chicago	1937	Ralph Guldahl.....	281	Oakland Hills
1912	J. J. McDermott.....	294	Buffalo	1938	Ralph Guldahl.....	284	Cherry Hills
1913	Francis Ouimet (a b)....	304	Brookline	1939	Byron Nelson (a).....	284	Philadelphia
1914	Walter Hagen.....	290	Midlothian	1940	W. Lawson Little, Jr. (a)...	287	Canterbury
1915	Jerome D. Travers (b)....	297	Baltusrol	1941	Craig Wood.....	284	Colonial
1916	Charles Evans, Jr. (b)....	286	Minikahda	1942-45	No tournaments†		
1917-18	No tournaments†			1946	Lloyd Mangrum (a).....	284	Canterbury
1919	Walter Hagen (a).....	301	Brae Burn	1947	Lew Worsham (a).....	282	St. Louis
1920	Edward Ray.....	295	Inverness	1948	Ben Hogan.....	276	Riviera

(a) Won play-off. (b) Amateur. *In 1898 competition was extended to 72 holes. †In 1917, Jock Hutchison, with a 292, won an Open Patriotic Tournament for the benefit of the American Red Cross at Whitemarsh Valley Country Club. ‡In 1942, Ben Hogan, with a 271, won a Hale America National Open Tournament for the benefit of the Navy Relief Society and USO at Ridgemoor Country Club.

UNITED STATES AMATEUR CHAMPIONS

Year	Winner	Where played	Year	Winner	Where played
1895	Charles B. Macdonald	Newport	1921	Jesse P. Guilford	St. Louis
1896	H. J. Whigham	Shinnecock Hills	1922	Jess W. Sweetser	Brookline
1897	H. J. Whigham	Chicago	1923	Max R. Marston	Flossmoor
1898	Findlay S. Douglas	Morris County	1924	R. T. Jones, Jr.	Merion
1899	H. M. Harriman	Onwentsia	1925	R. T. Jones, Jr.	Oakmont
1900	Walter J. Travis	Garden City	1926	George Von Elm	Baltusrol
1901	Walter J. Travis	Atlantic City	1927	R. T. Jones, Jr.	Minikahda
1902	Louis N. James	Glen View	1928	R. T. Jones, Jr.	Brae Burn
1903	Walter J. Travis	Nassau	1929	H. R. Johnston	Del Monte
1904	H. Chandler Egan	Baltusrol	1930	R. T. Jones, Jr.	Merion
1905	H. Chandler Egan	Chicago	1931	Francis Ouimet	Beverly
1906	Eben M. Byers	Englewood	1932	C. R. Somerville	Baltimore
1907	Jerome D. Travers	Euclid	1933	G. T. Dunlap, Jr.	Kenwood
1908	Jerome D. Travers	Garden City	1934	W. Lawson Little, Jr.	Brookline
1909	Robert A. Gardner	Chicago	1935	W. Lawson Little, Jr.	Cleveland
1910	W. C. Fownes, Jr.	Brookline	1936	John W. Fischer	Garden City
1911	Harold H. Hilton	Apawamis	1937	John Goodman	Alderwood
1912	Jerome D. Travers	Chicago	1938	Willie Turnesa	Oakmont
1913	Jerome D. Travers	Garden City	1939	Marvin H. Ward	North Shore
1914	Francis Ouimet	Ekwanoak	1940	R. D. Chapman	Winged Foot
1915	Robert A. Gardner	Detroit	1941	Marvin H. Ward	Omaha
1916	Charles Evans, Jr.	Merion	1942-45	No tournaments	
1917-18	No tournaments		1946	Ted Bishop	Baltusrol
1919	S. D. Herron	Oakmont	1947	Robert Riegel	Del Monte
1920	Charles Evans, Jr.	Engineers'	1948	Willie Turnesa	Memphis

UNITED STATES WOMEN CHAMPIONS

(Amateur)

Year	Winner	Where played	Year	Winner	Where played
1895	Mrs. C. S. Brown	Meadow Brook	1921	Marion Hollins	Hollywood (N. J.)
1896	Beatrix Hoyt	Morris County	1922	Glenna Collett	Greenbrier
1897	Beatrix Hoyt	Essex (Mass.)	1923	Edith Cummings	Westchester-Biltmore
1898	Beatrix Hoyt	Ardley	1924	Mrs. D. C. Hurd	Rhode Island
1899	Ruth Underhill	Philadelphia	1925	Glenna Collett	St. Louis
1900	Frances C. Griscom	Shinnecock Hills	1926	Mrs. G. H. Stetson	Merion
1901	Genevieve Hecker	Baltusrol	1927	Mrs. M. B. Horn	Cherry Valley
1902	Genevieve Hecker	Brookline	1928	Glenna Collett	Hot Springs (Va.)
1903	Bessie Anthony	Chicago	1929	Glenna Collett	Oakland Hills
1904	G. M. Bishop	Merion	1930	Glenna Collett	Los Angeles
1905	Pauline Mackay	Morris County	1931	Helen Hicks	Buffalo
1906	Harriot S. Curtis	Brae Burn	1932	Virginia Van Wie	Salem
1907	Margaret Curtis	Middlethian	1933	Virginia Van Wie	Exmoor
1908	K. C. Harley	Chevy Chase	1934	Virginia Van Wie	Whitemarsh Valley
1909	D. I. Campbell	Merion	1935	Mrs. E. H. Vare, Jr.	Interlachen
1910	D. I. Campbell	Homewood	1936	Pamela Barton	Canoe Brook
1911	Margaret Curtis	Baltusrol	1937	Mrs. J. A. Page, Jr.	Memphis
1912	Margaret Curtis	Essex (Mass.)	1938	Petty Berg	Westmoreland
1913	Gladys Ravenscroft	Wilmington	1939	Betty Jameson	Wee Burn
1914	Mrs. H. A. Jackson	Nassau	1940	Betty Jameson	Del Monte
1915	Mrs. C. H. Vanderbeck	Onwentsia	1941	Mrs. Frank Newell	Brookline
1916	Alexa Stirling	Belmont Springs	1942-45	No tournaments	
1917-18	No tournaments		1946	Mrs. M. D. Zaharias	Tulsa
1919	Alexa Stirling	Shawnee	1947	Louise Suggs	Franklin Hills
1920	Alexa Stirling	Mayfield	1948	Grace Lenczyk	Pebble Beach

United States Public Links Champions

Year	Winner	Where played	Year	Winner	Where played
1922	Edmund R. Held	Toledo, Ohio	1934	David A. Mitchell	Pittsburgh, Pa.
1923	Richard J. Walsh	Washington, D. C.	1935	Frank Strafacci	Indianapolis, Ind.
1924	Joseph Coble	Dayton, Ohio	1936	B. Patrick Abbott	Farmingdale, N. Y.
1925	R. J. McAuliffe	Garden City, N. Y.	1937	Bruce N. McCormick	San Francisco, Calif.
1926	Lester Bolstad	Buffalo, N. Y.	1938	Al Leach	Cleveland, Ohio
1927	C. F. Kauffmann	Cleveland, Ohio	1939	Andrew Szwedko	Baltimore, Md.
1928	C. F. Kauffmann	Philadelphia, Pa.	1940	Robert C. Clark	Detroit, Mich.
1929	C. F. Kauffmann	St. Louis, Mo.	1941	William M. Welch	Spokane, Wash.
1930	Robert E. Wingate	Jacksonville, Fla.	1942-45	No tournaments	
1931	Charles Ferrera	St. Paul, Minn.	1946	Smiley Quick	Denver, Colo.
1932	R. L. Miller	Louisville, Ky.	1947	Wilfred Crossley	Minneapolis, Minn.
1933	Charles Ferrera	Portland, Oreg.	1948	Michael R. Ferentz	Atlanta, Ga.

UNITED STATES P. G. A. CHAMPIONS

Source: The Professional Golfers' Association of America.

Year	Winner	Where played	Year	Winner	Where played
1916	Jim Barnes	Siwanoy, N. Y.	1933	Gene Sarazen	Blue Mound, Wis.
1917-18	No tournaments		1934	Paul Runyan	Park Club, Buffalo
1919	Jim Barnes	Engineers, L. I.	1935	Johnny Revolta	Twin Hills, Okla.
1920	Jock Hutchison	Flossmoor, Ill.	1936	Denny Shute	Pinehurst, N. C.
1921	Walter Hagen	Inwood, L. I.	1937	Denny Shute	Pittsburgh, Pa.
1922	Gene Sarazen	Oakmont, Pa.	1938	Paul Runyan	Shawnee-on-Delaware, Pa.
1923	Gene Sarazen	Peelham, N. Y.	1939	Henry Picard	Pomonok, L. I.
1924	Walter Hagen	French Lick, Ind.	1940	Byron Nelson	Hershey, Pa.
1925	Walter Hagen	Olympia Fields, Ill.	1941	Victor Ghezzi	Denver, Colo.
1926	Walter Hagen	Salisbury, L. I.	1942	Sam Snead	Atlantic City, N. J.
1927	Walter Hagen	Dallas, Texas	1943	No tournament	
1928	Leo Diegel	Baltimore, Md.	1944	Bob Hamilton	Spokane, Wash.
1929	Leo Diegel	Hillcrest, Calif.	1945	Byron Nelson	Dayton, Ohio
1930	Tommy Armour	Fresh Meadow, L. I.	1946	Ben Hogan	Portland, Oreg.
1931	Tom Creavy	Wannamoissett, R. I.	1947	Jim Ferrier	Plum Hollow, Mich.
1932	Olin Dutra	Keller Course, Minn.	1948	Ben Hogan	St. Louis, Mo.

BRITISH OPEN CHAMPIONS

Year	Winner	Score	Where played	Year	Winner	Score	Where played
1860	W. Park	174	Prestwick	1901	James Braid	309	Muirfield
1861	Tom Morris, Sr.	163	Prestwick	1902	Alex Herd	307	Hoylake
1862	Tom Morris, Sr.	163	Prestwick	1903	H. Vardon	300	Prestwick
1863	W. Park	168	Prestwick	1904	Jack White	296	Sandwich
1864	Tom Morris, Sr.	167	Prestwick	1905	James Braid	318	St. Andrews
1865	A. L. Strath	162	Prestwick	1906	James Braid	300	Muirfield
1866	W. Park	169	Prestwick	1907	Arnaud Massy	312	Hoylake
1867	Tom Morris, Sr.	170	Prestwick	1908	James Braid	291	Prestwick
1868	Tom Morris, Jr.	170	Prestwick	1909	J. H. Taylor	295	Deal
1869	Tom Morris, Jr.	154	Prestwick	1910	James Braid	299	St. Andrews
1870	Tom Morris, Jr.	149	Prestwick	1911	Harry Vardon (a)	303	Sandwich
1872	Tom Morris, Jr.	166	Prestwick	1912	E. Ray	295	Muirfield
1873	Tom Kidd	179	St. Andrews	1913	J. H. Taylor	304	Hoylake
1874	Mungo Park	159	Musselburgh	1914	Harry Vardon	306	Prestwick
1875	Willie Park	166	Prestwick	1915-19	No tournaments		
1875	Bob Martin	176	St. Andrews	1920	George Duncan	303	Deal
1876	Jamie Anderson	160	Musselburgh	1921	Jock Hutchison (a)	296	St. Andrews
1878	Jamie Anderson	157	Prestwick	1922	Walter Hagen	300	Sandwich
1879	Jamie Anderson	170	St. Andrews	1923	A. G. Havers	295	Troon
1880	Bob Ferguson	162	Musselburgh	1924	Walter Hagen	301	Hoylake
1881	Bob Ferguson	170	Prestwick	1925	Jim Barnes	300	Prestwick
1882	Bob Ferguson	171	St. Andrews	1926	R. T. Jones, Jr.	291	Royal Lytham, St. Annes
1883	W. L. Fernie (a)	159	Musselburgh	1927	R. T. Jones, Jr.	285	St. Andrews
1884	Jack Simpson	160	Prestwick	1928	Walter Hagen	292	Sandwich
1885	Bob Martin	171	St. Andrews	1929	Walter Hagen	292	Muirfield
1886	D. L. Brown	157	Musselburgh	1930	R. T. Jones, Jr.	291	Hoylake
1887	W. Park, Jr.	161	Prestwick	1931	T. D. Armour	296	Carnoustie
1888	Jack Burns	171	St. Andrews	1932	G. Sarazen	283	Princes, Sandwich
1889	W. Park, Jr. (a)	155	Musselburgh	1933	D. Shute (a)	292	St. Andrews
1890	John Ball	164	Prestwick	1934	T. H. Cotton	283	Sandwich
1891	Hugh Kirkaldy	166	St. Andrews	1935	A. Perry	283	Muirfield
1892*	H. H. Hilton	305	Muirfield	1936	A. H. Padgham	287	Royal Liverpool
1893	W. Auchterlonie	322	Prestwick	1937	T. H. Cotton	290	Carnoustie
1894	J. H. Taylor	326	Sandwich	1938	R. A. Whitcombe	295	Sandwich
1895	J. H. Taylor	322	St. Andrews	1939	R. Burton	290	St. Andrews
1896	H. Vardon (a)	316	Muirfield	1940-45	No tournaments		
1897	H. H. Hilton	314	Hoylake	1946	Sam Snead	290	St. Andrews
1898	H. Vardon	307	Prestwick	1947	Fred Daly	293	Hoylake
1899	H. Vardon	310	Sandwich	1948	Henry Cotton	284	Gullane, Muirfield
1900	J. H. Taylor	309	St. Andrews				

(a) Won play-off. *In 1892 competition was extended to 72 holes.

Five-Way Tie in Tacoma Tourney

The Tacoma (Wash.) Open, one of the events on the P.G.A. 1948 summer tour, ended in a five-way tie with Ed Oliver,

Charles Congdon, Fred Haas, Jr., Vic Ghezzi and Cary Middlecoff all even at 274 for the 72-hole test. Oliver won the play-off.

BRITISH AMATEUR CHAMPIONS

Year	Winner	Where played	Year	Winner	Where played
1885	A. F. Macfie	Hoylake	1913	H. H. Hilton	St. Andrews
1886	H. G. Hutchinson	St. Andrews	1914	J. L. C. Jenkins	Sandwich
1887	H. G. Hutchinson	Hoylake	1915-19	No tournaments	
1888	John Ball	Prestwick	1920	Cyril J. H. Tolley	Muirfield
1889	J. E. Laidlay	St. Andrews	1921	W. I. Hunter	Hoylake
1890	John Ball	Hoylake	1922	E. W. E. Holderness	Prestwick
1891	J. E. Laidlay	St. Andrews	1923	R. H. Wethered	Deal
1892	John Ball	Sandwich	1924	E. W. E. Holderness	St. Andrews
1893	Peter L. Anderson	Prestwick	1925	Robert Harris	Westward Ho
1894	John Ball	Hoylake	1926	Jess W. Sweetser	Muirfield
1895	L. M. B. Melville	St. Andrews	1927	Dr. W. Tweddell	Hoylake
1896	F. G. Tait	Sandwich	1928	T. P. Perkins	Prestwick
1897	A. J. T. Allan	Muirfield	1929	C. J. H. Tolley	Sandwich
1898	F. G. Tait	Hoylake	1930	R. T. Jones, Jr.	St. Andrews
1899	John Ball	Prestwick	1931	E. Martin Smith	Westward Ho
1900	H. H. Hilton	Sandwich	1932	J. De Forest	Muirfield
1901	H. H. Hilton	St. Andrews	1933	Hon. M. Scott	Hoylake
1902	C. Hutchings	Hoylake	1934	W. Lawson Little, Jr.	Prestwick
1903	R. Maxwell	Muirfield	1935	W. Lawson Little, Jr.	Royal Lytham, St. Annes
1904	W. J. Travis	Sandwich	1936	H. Thomson	St. Andrews
1905	A. G. Barry	Prestwick	1937	R. Sweeny, Jr.	Sandwich
1906	James Robb	Hoylake	1938	C. R. Yates	Troon
1907	John Ball	St. Andrews	1939	A. Kyle	Hoylake
1908	E. A. Lassen	Sandwich	1940-45	No tournaments	
1909	R. Maxwell	Muirfield	1946	J. Bruen	Birkdale
1910	John Ball	Hoylake	1947	Willie Turnesa	Carnoustie
1911	H. H. Hilton	Prestwick	1948	Frank Stranahan	Sandwich
1912	John Ball	Westward Ho			

Intercollegiate Golf Association of America Champions

Year	Individual	Team	Year	Individual	Team
1897	Louis P. Bayard, Jr., Princeton	Yale	1917-18	No tournaments	
1898*	John Reid, Jr., Yale	Harvard	1919	A. L. Walker, Jr., Columbia	Princeton
	James F. Curtis, Harvard	Yale	1920	Jess W. Sweetser, Yale	Princeton
1899	Percy Pyne, 2d, Princeton	Harvard	1921	J. Simpson Dean, Princeton	Dartmouth
1900	No tournament		1922	Pollack Boyd, Dartmouth	Princeton
1901	H. Lindsley, Harvard	Harvard	1923	Dexter Cummings, Yale	Princeton
1902*	Charles Hitchcock, Jr., Yale	Yale	1924	Dexter Cummings, Yale	Yale
	H. Chandler Egan, Harvard	Harvard	1925	G. Fred Lamprecht, Tulane	Yale
1903	F. O. Reinhart, Princeton	Harvard	1926	G. Fred Lamprecht, Tulane	Yale
1904	A. L. White, Harvard	Harvard	1927	Watts Gunn, Georgia Tech.	Princeton
1905	Robert Abbott, Yale	Yale	1928	M. J. McCarthy, Jr., Georgetown	Princeton
1906	W. E. Clow, Jr., Yale	Yale	1929	Tom Aycok, Yale	Princeton
1907	Ellis Knowles, Yale	Yale	1930	George T. Dunlap, Jr., Princeton	Princeton
1908	H. H. Wilder, Harvard	Yale	1931	George T. Dunlap, Jr., Princeton	Yale
1909	Albert Seckel, Princeton	Yale	1932	John W. Fischer, Jr., Michigan	Yale
1910	Robert E. Hunter, Yale	Yale	1933	Walter Emery, Oklahoma	Yale
1911	George C. Stanley, Yale	Yale	1934	Charles R. Yates, Georgia Tech.	Michigan
1912	F. C. Davison, Harvard	Yale	1935	Ed White, U. of Texas	Michigan
1913	Nathaniel Wheeler, Yale	Yale	1936	Charles Kocsis, Michigan	Yale
1914	Edward P. Allis, 3d, Harvard	Princeton	1937	Fred Haas, Jr., L. S. U.	Princeton
1915	Francis R. Blossom, Yale	Yale	1938	John P. Burke, Georgetown	Stanford
1916	J. W. Hubbell, Harvard	Princeton			

*Two tournaments, in spring and fall.

National Collegiate Athletic Association Champions

Year	Individual	Team	Year	Individual	Team
1939	Vincent D'Antoni, Tulane	Stanford	1943	Wallace Ulrich, Carleton	Yale
1940	F. Dixon Brooke, Virginia	Princeton*	1944	Louis Lick, Minnesota	Notre Dame
1941	Earl Stewart, L. S. U.	L. S. U.*	1945	John Lorms, Ohio State	Ohio State
1942	Frank Tatum, Jr., Stanford	Stanford*	1946	George Hamer, Georgia	Stanford
		L. S. U.*	1947	Dave Barclay, Michigan	L. S. U.
			1948	Bobby Harris, San Jose St.	San Jose St.

*Tie.

Walker Cup Record**MEN (AMATEUR)**

Year	Where played
1922 United States 8, Great Britain 4	Southampton
1923 United States 6, Great Britain 5	St. Andrews, Scotland
1924 United States 9, Great Britain 3	Garden City G. C.
1926 United States 6, Great Britain 5	St. Andrews, Scotland
1928 United States 11, Great Britain 1	Wheaton, Ill.
1930 United States 10, Great Britain 2	Royal St. George's
1932 United States 8, Great Britain 1	The Country Club, Brookline, Mass.
1934 United States 9, Great Britain 2	St. Andrews, Scotland
1936 United States 9, Great Britain 0	Pine Valley G. C., Clementon, N. J.
1938 Great Britain 7, United States 4	St. Andrews, Scotland
1947 United States 8, Great Britain 4	St. Andrews

P. G. A. TOURNEY WINNERS, 1948**Winter Tour**

Event and winner	Score
LOS ANGELES OPEN—Ben Hogan	275
CROSBY PRO-AMATEUR—Lloyd Mangrum	205
RICHMOND (CALIF.) OPEN—E. J. (Dutch) Har-	
rison	273
PHOENIX OPEN—Bobby Locke	268
TUCSON OPEN—Skip Alexander	264
TEXAS OPEN—Sam Snead	264
RIO GRANDE VALLEY OPEN—Lloyd Mangrum*	260
NEW ORLEANS OPEN—Bob Hamilton	289
ST. PETERSBURG OPEN—Lawson Little	272
MIAMI 4-BALL—Jim Ferrier-Cary Middlecoff	—
JACKSONVILLE OPEN—Chick Harbert	284
GREATER GREENSBORO OPEN—Lloyd Mangrum	278
CHARLOTTE OPEN—Chick Harbert	273
AUGUSTA MASTERS'—Claude Harmon	279

Summer Tour

NATIONAL CAPITAL INVITATION—Skip Alex-	
ander	271
GOODALL INVITATION—Herman Barron	plus 38
PHILADELPHIA INQUIRER OPEN—Johnny Palmer	281
P. G. A. CHAMPIONSHIP—Ben Hogan	—
COLONIAL OPEN—Clayton Heafner	272
ALBUQUERQUE OPEN—Jimmy Demaret	268
UNITED STATES OPEN—Ben Hogan	276
CHICAGO VICTORY OPEN—Bobby Locke	266
INVERNESS ROUND—ROBIN 4-BALL—Hogan-Dem-	
aret	—
MOTOR CITY OPEN—Ben Hogan*	275
COLUMBUS OPEN—Lloyd Mangrum	268
DAPPER DAN OPEN—Vic Ghezzi	271
READING (PA.) OPEN—Ben Hogan	269
WESTERN OPEN—Ben Hogan*	281
ALL-AMERICAN CHAMPIONSHIP—Lloyd Mangrum	277
ST. PAUL OPEN—Jimmy Demaret*	273
DENVER OPEN—Ben Hogan	270
SALT LAKE CITY OPEN—Lloyd Mangrum*	274
RENO OPEN—Ben Hogan	269
TACOMA OPEN—Ed Oliver*	274
CANADIAN OPEN—Charles Congdon	280
PORTLAND (OREG.) OPEN—Fred Haas, Jr.*	270
GLENDALE (CALIF.) OPEN—Ben Hogan	275

*Won play-off.

AUGUSTA MASTERS' CHAMPIONS

Year and winner	Score	Year and winner	Score
1934—Horton Smith	284	1941—Craig Wood	280
1935—Gene Sarazen*	282	1942—Byron Nelson	280
1936—Horton Smith	285	1943-45—No tournaments	
1937—Byron Nelson	283	1946—Herman Keiser	282
1938—Henry Picard	285	1947—Jimmy Demaret	281
1939—Ralph Guldahl	279	1948—Claude Harmon	279
1940—Jimmy Demaret	280		

*Won play-off.

Ryder Cup Record**MEN (PROFESSIONAL)**

Year	Where played
1927 United States 9½, Great Britain 2½	Worcester C. C.
1929 Great Britain 7, United States 5	Moortown, Eng.
1931 United States 9, Great Britain 3	Scioto C. C.
1933 Great Britain 6½, United States 5½	Southport, Eng.
1935 United States 9, Great Britain 3	Ridgewood C. C.
1937 United States 8, Great Britain 4	Southport, Eng.
1947 United States 11, Great Britain 1	Portland, Oreg.

Curtis Cup Record**WOMEN**

Year	Where played
1932 United States 5½, Great Britain 3½	Wentworth, Eng.
1934 United States 6½, Great Britain 2½	Chevy Chase
1936 United States 4½, Great Britain 4½	Gleneagles
1938 United States 5½, Great Britain 3½	Essex C. C.
1948 United States 6½, Great Britain 2½	Birkdale

OTHER CHAMPIONS, 1948**Match Play****MEN**

BROADMOOR—Charles Coe, Ardmore, Okla.
 CANADIAN AMATEUR—Frank Stranahan, Toledo
 NATIONAL CADDY—Don Addington, Houston
 NATIONAL JUNIOR—Dean Lind, Rockford, Ill.
 NATIONAL LEFTHANDERS'—Loddie Kempa, Stillwater, Okla.
 NORTH-SOUTH AMATEUR—Harvie Ward, Univ. of No. Carolina
 SOUTHERN AMATEUR—Gene Dahlbender, Jr., Atlanta
 TRANS-MISSISSIPPI—Robert Riegel, Glendale, Calif.
 WESTERN AMATEUR—Robert Riegel

WOMEN

BRITISH AMATEUR—Louise Suggs, Lithia Springs, Ga.
 CANADIAN OPEN—Grace Lengczyk, Newington, Conn.
 NATIONAL INTERCOLLEGIATE—Grace Lengczyk, Stetson U.
 NEGRO NATIONAL OPEN—Mrs. Mary Brown, Erie, Pa.
 NORTH-SOUTH—Louise Suggs
 SOUTHERN—Polly Riley, Fort Worth
 TRANS-MISSISSIPPI—Polly Riley
 WESTERN AMATEUR—Dorothy Kieley, Long Beach, Calif.
 WESTERN OPEN—Patty Berg, Minneapolis

Medal Play**MEN**

	Score
ALL-AMERICAN AMATEUR—Frank Stranahan, Toledo	283
NATIONAL SENIOR—John F. Riddell, Jr., Garden City, N. Y.	149
NEGRO NATIONAL OPEN—Howard Wheeler, Philadelphia	287

WOMEN

ALL-AMERICAN OPEN—Mrs. Mildred D. Zaharias, Ferndale, N. Y.	309
EASTERN AMATEUR—Patricia O'Sullivan, Orange, Conn.	229
NATIONAL OPEN—Mrs. Mildred D. Zaharias	300
NATIONAL SENIOR—Mrs. R. B. Meckley, Washington, D.C.	170

Team

GRISCOM CUP (Women)—New York
 INTERNATIONAL SENIOR (Duke of Devonshire Cup)—United States
 LESLEY CUP—Quebec
 NATIONAL PUBLIC LINKS—North Carolina

ICE HOCKEY

ICE HOCKEY, by birth and upbringing a Canadian game, is an offshoot of field hockey. Some historians state that the first ice hockey game was played in Montreal in December, 1879, between two teams composed almost exclusively of McGill University students, but others assert that Kingston, Ont., or Halifax, N. S., were scenes of earlier hockey games. In the Montreal game of 1879 there were fifteen players on a side and they used an assortment of crude sticks to keep the puck in motion. Early rules allowed nine men on a side but the number was reduced to seven in 1886 and finally reduced to six, the standard of today.

The first governing body of the sport was the Amateur Hockey Association of Canada, organized in 1887. In the winter of 1894-95 a group of college students from the United States visited Canada, saw hockey played, became enthused over the game and introduced it as a winter sport when they returned home. This was the

start of hockey in the United States. The first professional league was the International Hockey League that operated, strangely enough, not in Canada but in northern Michigan in 1904-06 and included as players such famous stars as Cyclone Taylor and Hod Stuart, later included in the Hockey Hall of Fame.

Until 1910, professionals and amateurs were allowed to play together on "mixed teams", but this arrangement ended with the formation of the first "big league", the National Hockey Association, in eastern Canada in 1910. The Pacific Coast League, to provide professional hockey in the West, was organized in 1911 with Seattle (and later other American cities) included in the circuit. The National Hockey League replaced the National Hockey Association in 1917. Boston, in 1924, was the first American city to join that circuit. The Stanley Cup, top trophy of hockey, was competed for by "mixed teams" from 1894 to 1910, thereafter by professionals.

Ice Hockey Statistics

Source: James C. Hendy, editor, *Official National Hockey Guide*.

PROFESSIONAL

NATIONAL LEAGUE

Stanley Cup Play-Offs, 1948

(Figures in parentheses indicate number of victories)

Final	
SERIES C	
Toronto (4) vs. Detroit (0)	
April 7—Toronto 5, Detroit 3	
April 10—Toronto 4, Detroit 2	
April 11—Toronto 2, Detroit 0	
April 14—Toronto 7, Detroit 2	

*Overtime.

SERIES A	
Toronto (4) vs. Boston (1)	
March 24—Toronto 5, Boston 4*	
March 27—Toronto 5, Boston 3	
March 30—Toronto 5, Boston 1	
April 1—Boston 3, Toronto 2	
April 3—Toronto 3, Boston 2	

Semifinals

SERIES B	
Detroit (4) vs. Rangers (2)	
March 24—Detroit 2, Rangers 1	
March 26—Detroit 5, Rangers 2	
March 28—Rangers 3, Detroit 2	
March 30—Rangers 3, Detroit 1	
April 1—Detroit 3, Rangers 1	
April 4—Detroit 4, Rangers 2	

LEADING SCORERS IN THE NATIONAL LEAGUE

Regular Season					
Player and club	Games	Gls.	As.	Pts.	PIM
Elmer Lach, Montreal	60	30	31	61	72
Buddy O'Connor, New York	60	24	36	60	8
Doug Bentley, Chicago	60	20	37	57	16
Gaye Stewart, Tor.-Chi.	61	27	29	56	83
Max Bentley, Chi.-Tor.	59	26	28	54	14
Bud Poile, Tor.-Chi.	58	25	29	54	17
Maurice Richard, Montreal	53	28	25	53	89
Syl Apps, Toronto	55	26	27	53	12
Ted Lindsay, Detroit	60	33	19	52	95
Roy Conacher, Chicago	52	22	27	49	4
Jim McFadden, Detroit	60	24	24	48	12
Edgar Laprade, New York	59	13	34	47	7
Ted Kennedy, Toronto	60	25	21	46	32
Gordon Howe, Detroit	60	16	28	44	63

Player and club	Games	Gls.	As.	Pts.	PIM
Sid Abel, Detroit	60	14	30	44	69
Harry Watson, Toronto	57	21	20	41	16
Tony Leswick, New York	60	24	18	40	76

Stanley Cup Play-Offs

Ted Kennedy, Toronto	9	8	6	14	0
Max Bentley, Toronto	9	4	7	11	0
Pete Horeck, Detroit	10	3	7	10	12
Jim McFadden, Detroit	10	5	3	8	10
Syl Apps, Toronto	9	4	4	8	0
Harry Watson, Toronto	9	5	2	7	9
Milt Schmidt, Boston	5	2	5	7	2
Vic Lynn, Toronto	9	2	5	7	20
Howie Meeker, Toronto	9	2	4	6	15

STANLEY CUP WINNERS

Emblematic of world professional championship.

1894—Montreal A. A. A.	1907—Mont. Wanderers (Mar.)	1921—Ottawa Senators	1935—Montreal Maroons
1895—Montreal Victorias	1908—Montreal Wanderers	1922—Toronto St. Patricks	1936—Detroit Red Wings
1896—Winnipeg Victorias	1909—Ottawa Senators	1923—Ottawa Senators	1937—Detroit Red Wings
1897—Montreal Victorias	1910—Montreal Wanderers	1924—Montreal Canadiens	1938—Chicago Black Hawks
1898—Montreal Victorias	1911—Ottawa Senators	1925—Victoria Cougars	1939—Boston Bruins
1899—Montreal Victorias	1912—Quebec Bulldogs	1926—Montreal Maroons	1940—N. Y. Rangers
1900—Montreal Shamrocks	1913—Quebec Bulldogs	1927—Ottawa Senators	1941—Boston Bruins
1901—Winnipeg Victorias	1914—Toronto	1928—N. Y. Rangers	1942—Toronto Maple Leafs
1902—Montreal A. A. A.	1915—Vancouver Millionaires	1929—Boston Bruins	1943—Detroit Red Wings
1903—Ottawa Silver Seven	1916—Montreal Canadiens	1930—Montreal Canadiens	1944—Montreal Canadiens
1904—Ottawa Silver Seven	1917—Seattle Metropolitans	1931—Montreal Canadiens	1945—Toronto Maple Leafs
1905—Ottawa Silver Seven	1918—Toronto Arenas	1932—Toronto Maple Leafs	1946—Montreal Canadiens
1906—Montreal Wanderers	1919—Series unfinished*	1933—N. Y. Rangers	1947—Toronto Maple Leafs
1907—Kenora Thistles	1920—Ottawa Senators	1934—Chicago Black Hawks	1948—Toronto Maple Leafs

*The Montreal Canadiens and Seattle, P.C.H.L. champions, had played five games at Seattle, Wash., when an influenza epidemic (which took the life of Joe Hall of the Canadiens) caused the Department of Health to stop the series. Each team won two games, with one contest ending in a tie.

FINAL 1947-48 N.H.L. STANDING

(Regular season)

	W.	L.	T.	Pts.	For	Agst.
Toronto Maple Leafs....	32	15	13	77	182	143
Detroit Red Wings.....	30	18	12	72	187	148
Boston Bruins.....	23	24	13	59	167	168
New York Rangers.....	21	26	13	55	176	201
Montreal Canadiens.....	20	29	11	51	147	169
Chicago Black Hawks....	20	34	6	46	195	225

1947-48 ALL-STAR TEAMS

FIRST TEAM	SECOND TEAM
Toronto, Toronto.....G.....	Brimsek, Boston
Jackenbush, Detroit.....D.....	Reardon, Montreal
Stewart, Detroit.....D.....	Colville, Rangers
Each, Montreal.....C.....	O'Connor, Rangers
indsay, Detroit.....W.....	G. Stewart, Chicago
Richard, Montreal.....W.....	Poile, Chicago

1947-48 SPECIAL TROPHY WINNERS

MART (Most valuable player)—Buddy O'Connor
 ALDER (outstanding rookie)—Jim McFadden
 ADY BYNG (most gentlemanly)—Buddy O'Connor
 EZINA (outstanding goaltender)—Turk Broda

UNITED STATES LEAGUE

Final 1947-48 Standing of the Clubs

(Regular season)

NORTHERN DIVISION

	W.	L.	T.	Pts.	For	Agst.
Kansas City Pla-Mors....	35	27	4	74	274	244
Minneapolis Millers....	34	26	6	74	259	228
Omaha Knights.....	32	27	7	71	275	252
St. Paul Saints.....	30	30	6	66	236	245

SOUTHERN DIVISION

	W.	L.	T.	Pts.	For	Agst.
Houston Huskies.....	36	27	3	75	317	267
Fort Worth Rangers....	30	31	5	65	230	234
Tulsa Oilers.....	23	34	9	55	222	275
Dallas Texans.....	21	39	6	48	208	276

Championship Play-offs, 1948

Series

- A—Houston beat Kansas City, 4 games to 3.
- B—Minneapolis beat Omaha, 2 games to 1.
- C—Fort Worth beat Tulsa, 2 games to 0.
- D—Minneapolis beat Fort Worth, 2 games to 0.
- E (FINAL)—Houston beat Minneapolis, 3 games to 2.

Champions

1946—Kansas City	1947—Kansas City
1948—Houston	

FINAL 1948 OLYMPIC STANDING

(At St. Moritz, Jan. 30-Feb. 8)

	W.	L.	T.	Pts.	For	Agst.
Canada.....	7	0	1	15	69	5
Czechoslovakia.....	7	0	1	15	80	18
Switzerland.....	6	2	0	12	67	21
United States.....	5	3	0	10	86	33
Sweden.....	4	4	0	8	55	28
Great Britain.....	3	5	0	6	39	47
Poland.....	2	6	0	4	29	97
Austria.....	1	7	0	2	33	77
Italy.....	0	8	0	0	24	156

*Title awarded to Canada for having a greater number of "goals for," after deducting the number of "goals against."

Leading Scorers

(Regular season)

	Games	Gls.	As.	Pts.	Pen. in min.
George Agar, Houston....	66	43	69	112	50
Hub Macey, Houston....	59	31	60	91	8
Ken McKenzie, Houston..	66	32	53	85	24
Ray Powell, Kansas City..	62	37	47	84	16
Gino Rozzini, St. Paul....	65	22	60	82	79
Bus Weyerherley, Minneapolis	61	40	38	78	4
Max McNab, Omaha.....	44	44	32	76	10
Clint Smith, Tulsa.....	64	36	33	71	10
Hank Blade, Kansas City..	51	29	41	70	32
Tom Forgie, Minneapolis..	66	29	41	70	2

HOCKEY'S HALL OF FAME

Kingston, Ontario

Robert Baker	Aurel Joliat	Lester Patrick	Hod Stuart
Russell Bowie	Frank McGee	Tom Phillips	Capt. James T. Sutherland
Hubrey Clapper	Howie Morenz	Harvey Pulford	Fred (Cyclone) Taylor
Charles Gardiner	Frank Nighbor	Eddie Shore	Georges Vezina
Edie Gerard			

AMERICAN LEAGUE

Final 1947-48 Standing of the Clubs

(Regular season)

EASTERN DIVISION

	W.	L.	T.	Pts.	For	Goals Agst.
Providence Reds	41	23	4	86	343	277
New Haven Ramblers	31	30	7	69	234	242
Hershey Bears	25	30	13	63	240	273
Philadelphia Rockets	22	41	5	49	260	331
Springfield Indians	19	42	7	45	237	308
Washington Lions	17	45	6	40	241	369

WESTERN DIVISION

	W.	L.	T.	Pts.	For	Goals Agst.
Cleveland Barons	43	13	12	98	332	232
Pittsburgh Hornets	38	18	12	88	238	170
Buffalo Bisons	41	23	4	86	277	198
Indianapolis Caps	32	30	6	70	293	260
St. Louis Flyers	22	36	10	54	242	291

Calder Cup Play-Offs, 1948

Series

- A—Cleveland beat Providence, 4 games to 1.
 B—New Haven beat Pittsburgh, 2 games to 0.
 C—Buffalo beat Hershey, 2 games to 0.
 D—Buffalo beat New Haven, 2 games to 0.
 E (FINAL)—Cleveland beat Buffalo, 4 games to 0.

Leading Scorers

(Regular season)

Player and club	Games	Gls.	As.	Pts.	Pen. in min.
Carl Liscombe, Providence	68	50	68	118	10
Cliff Simpson, Indianapolis	68	48	62	110	31
Harvey Fraser, Providence	64	45	52	97	12
John Chad, Providence	67	41	53	94	
Paul Courteau, Springfield	68	28	64	92	36
Wally Stefaniw, Philadelphia	67	15	72	87	22
John Holota, Cleveland	68	48	38	86	11
John Mahaffy, Philadelphia	60	26	57	83	6
Chuck Scherza, Providence	68	18	65	83	72
Eddie Kobussen, Springfield	67	40	42	82	24
Ab DeMarco, Cleveland	60	20	61	81	37
Don Grosso, St. Louis	65	34	47	81	10
Paul Gladu, St. Louis	67	34	47	81	24

Champions

- 1941—Cleveland
 1942—Indianapolis
 1943—Buffalo
 1944—Buffalo
 1945—Cleveland
 1946—Buffalo
 1947—Hershey
 1948—Cleveland

Amateur Ice Hockey

Source: Stan Saplin, Hockey Dept., Madison Square Garden.

A. H. A. OF THE U. S.

Senior Open Championship, 1948

(At New York and Toledo, March 21-28.)

Toledo Mercurys vs. New York Rovers

- FIRST GAME—Toledo 6, New York 5.
 SECOND GAME—New York 6, Toledo 2.
 THIRD GAME—Toledo 4, New York 2.
 FOURTH GAME—New York 3, Toledo 2.
 FIFTH GAME—Toledo 7, New York 4.

FINAL STANDING OF THE CLUBS

	Won	Lost	Pct.
Toledo Mercurys	3	2	.600
New York Rovers	2	3	.400

EASTERN LEAGUE

	W.	L.	T.	Pts.	For	Goals Agst.
Baltimore Clippers	31	16	1	63	219	148
New York Rovers	28	18	2	58	114	140
Atlantic City Sea Gulls	17	25	6	40	167	196
Boston Olympics	14	29	5	33	123	139

QUEBEC SENIOR LEAGUE

	W.	L.	T.	Pts.	For	Goals Agst.
*Ottawa Senators	35	11	2	72	271	139
Montreal Royals	34	14	0	68	241	159
Shawinigan Falls Cats	26	17	5	57	206	189
Quebec Aces	23	20	5	51	175	185
Valleyfield Braves	16	31	1	33	207	251
New York Rovers	14	32	1	29	150	220
Boston Olympics	12	35	0	24	173	287

*Won play-off.

First International Meet in 1895

With teams comprised mainly of representatives of the London (England) A. C. and the New York A. C., the first international track and field meet in this country was held at Manhattan Field, New York, on Sept. 21, 1895. Bernie Wefers, Michael F. Sweeney and Stephen Chase of the Winged Foot club set world marks at the event.

PACIFIC COAST LEAGUE

NORTHERN DIVISION

	W.	L.	T.	Pts.	For	Goals Agst.
Seattle Ironmen	42	27	3	87	311	239
Tacoma Rockets	34	28	4	72	294	281
*Vancouver Canucks	34	29	3	71	284	284
New Westminster Royals	27	38	1	55	293	322
Portland Eagles	17	46	3	37	256	345

*Won divisional play-off and beat San Diego for league play-off title.

SOUTHERN DIVISION

	W.	L.	T.	Pts.	For	Goals Agst.
Los Angeles Monarchs	36	26	4	76	306	270
San Francisco Shamrocks	35	29	2	72	243	227
*San Diego Sky Hawks	32	31	3	67	242	258
Fresno Falcons	30	32	2	64	229	236
Oakland Oaks	29	36	1	59	236	252

*Won divisional play-off.

ATLANTIC LEAGUE

	W.	L.	T.	Pts.	For	Goals Agst.
Needham Rockets	9	0	1	19	58	25
Springfield Rifles	6	1	3	15	43	38
*Rhode Island Seagulls	5	3	2	12	48	32
New Haven Bears	2	4	4	8	36	38
Boston Juniors	1	8	1	3	18	33
New York Metropolitan	1	8	1	3	32	52

*Won play-off.

OTHER CHAMPIONS, 1948

NATIONAL A.A.U.—Colgate University
 A.H.A JUNIOR OPEN—Hettche Spitfires, Detroit

Canadian

ALLAN CUP (senior amateur)—Edmonton (Alberta) Flyers
 MEMORIAL CUP (junior amateur)—Port Arthur (Ontario) Bruins

Intercollegiate

N.C.A.A.—Michigan
 INTERNATIONAL LEAGUE—Toronto
 QUADRANGULAR LEAGUE—Dartmouth
 CANADIAN—Toronto

MOTORCYCLING

Winners of National Championships in 1948

Source: American Motorcycle Association.

Road Racing

Event and where held	Winner and home city	Motorcycle	Time
100 MILES (Daytona Beach, Fla.)	Don Evans, San Bernardino, Calif.	Norton	1:18:28.69
100 MILES (Wasaga Beach, Ont.)	Julian Wooleyhan, Buffalo, N. Y.	Harley-Davidson	1:47:43
100 MILES (Laconia, N. H.)	Joe Weatherly, Norfolk, Va.	Harley-Davidson	2:03:06
100 MILES (Daytona Beach, Fla.)	Floyd Emde, San Diego, Calif.	Indian	2:22:56.27

Dirt Track Racing

HALF-MILE TRACK

1 MILES (Spencer, Iowa)	Leo Anthony, Port Huron, Mich.	Harley-Davidson	3:13:55
1 MILES (Montgomery, Ala.)	Paul Albrecht, Sacramento, Calif.	Harley-Davidson	5:05:40
1 MILES (Shreveport, La.)	Buck Brigrance, Jacksonville, Fla.	Harley-Davidson	8:08

MILE TRACK

1 MILES (Atlanta, Ga.)	Bobby Hill, Columbus, Ohio	Indian	7:46.47*
1 MILES (Milwaukee)	Billy Huber, Dayton, Ohio	Harley-Davidson	7:46.47*
1 MILES (Springfield, Ill.)	Jimmy Chann, Deerfield, N. J.	Harley-Davidson	11:22.89
1 MILES (Springfield, Ill.)	Jimmy Chann, Deerfield, N. J.	Harley-Davidson	18:30.97

*Dead heat.

Speedway Racing

MILE TRACK

100 MILES (Langhorne, Pa.)	Ed Kretz, Wilmer, Calif.	Indian	72:18.41
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Tourist Trophy Racing

150 CUBIC INCH (Peoria, Ill.)	Bill Miller, Mountville, Pa.	Harley-Davidson	6:47.72
150 CUBIC INCH (Peoria, Ill.)	Billy Douglas, East St. Louis, Ill.	Harley-Davidson	7:36.23
150 MILES (Greenville, S. C.)	William Magurany, Wood River, Ill.	Harley-Davidson	1:04:21.40
100 MILES (Riverside, Calif.)	Ed Kretz, Wilmer, Calif.	Indian	2:26:02.15

ENDURANCE RUN (Lansing, Mich.)	Earl Flanders, Pasadena, Calif.	AJS	
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Hill Climb, Class A

(All events at Port Jervis, N. Y.)

Event	Winner and home city	Motorcycle	Time
4 CUBIC INCH CLASS A	Sam Kakabar, Lloydell, Pa.	Harley-Davidson	10.35
4 CUBIC INCH EXPERT	Al Skrelunas, Detroit	Harley-Davidson	9.92
4 CUBIC INCH CLASS B	Joe Hemmis, Cumberland, Md.	Harley-Davidson	11.69
5 CUBIC INCH QUALIFYING	Tee Hemmis, Cumberland, Md.	Harley-Davidson	11.65

Hill Climb, Class C

(All events at San Jose, Calif.)

5 CUBIC INCH NOVICE	Harold Mathews, San Luis Obispo, Calif.	Harley-Davidson	16.14
10 CUBIC INCH NOVICE	Nick Infantino, Campbell, Calif.	Harley-Davidson	15.67
15 CUBIC INCH AMATEUR	Cliff Ricker, Sunnyvale, Calif.	Harley-Davidson	16.76
20 CUBIC INCH AMATEUR	Tom Turner, Oakland, Calif.	Harley-Davidson	14.97
25 CUBIC INCH EXPERT	Sam Arena, San Jose, Calif.	Harley-Davidson	14.56
30 CUBIC INCH EXPERT	Clifford Lundstrom, Oakland, Calif.	Harley-Davidson	12.24

First U. S. Track Meet in 1866

The New York Athletic Club was the first organization in the United States to use spiked shoes for track and field meets. The shoes were brought over from London by V. B. (Father Bill) Curtis and worn by the quad on Nov. 11, 1866, in the first open amateur meet, held by the Winged Foot Club. The event took place in an unfinished structure located at Third Avenue and Sixty-third Street, New York, which was later known as the Empire Skating Rink.

Records made were the first to be claimed in this country. They follow: 220 yards—28 seconds; 440 yards—1:20; 880 yards—2:26; hurdles (distance and height not given)—4 seconds; standing high jump—4 ft. 5 in.; running high jump—5 ft. 2 in.; running long jump—17 ft.; pole leaping—8 ft. 3 in.; throwing hammer—73 ft.; putting shot—35 ft. in.; one-mile walk—7:50½.

Perry Sets Rope-Climb Mark

Don Perry, 17-year-old Venice, Calif., high school boy, lowered the world record for the 20-foot rope climb to 3.1 seconds in winning the 1948 National A.A.U. championship from Garvin Smith of Los Angeles City College, last year's victor. Both Perry and Smith surpassed the latter's mark of 3.4 seconds on all three of their trials at State College, Pa., on May 1, 1948. Perry, from a sitting start, was timed in 3.1 twice and in 3.2, while Smith made it in 3.2 on each try. The 3.4 record, set in 1947, never was officially recognized because a starting gun was not used. The previous standard was 4.4, made by Stephen Greene of Penn State in 1945.

Other British Tennis Champions, 1948

MIXED DOUBLES—John Bromwich, Australia-A. Louise Brough, Beverly Hills, Calif.

BASKETBALL

BASKETBALL may be unique in sports. It is one game concerning which it is safe to state when, where and how it originated. In the winter of 1891-92, Dr. James Naismith, an instructor in the Y.M.C.A. Training College (now Springfield College) at Springfield, Mass., deliberately invented the game of basketball in order to provide indoor exercise and competition for the students between the closing of the football season and the opening of the baseball season. He affixed peach baskets overhead on the walls at opposite ends of the gymnasium and, with an association (soccer) football, organized teams to play his new game in which the purpose was to toss the ball into one basket and prevent, as far as possible, the opponents from tossing the ball into the other basket. Fun-

damentally, the game is the same today, though there have been some improvements in equipment and many changes in the rules.

Because Dr. Naismith had eighteen available players when he invented the game, the first rule was: "There shall be nine players on each side." Later the number of players became optional, depending upon the size of the available court, but the five-player standard was adopted when the game spread over the country. United States soldiers introduced the game in Europe in World War I and, being taken up by foreign nations, it soon became a world-wide sport. An odd point is that, though it is still chiefly an indoor game in the United States, in other countries it flourishes almost entirely outdoors.

Intercollegiate Statistics

NATIONAL COLLEGIATE A. A. CHAMPIONS

1939—Oregon	1944—Utah
1940—Indiana	1945—Oklahoma A & M
1941—Wisconsin	1946—Oklahoma A & M
1942—Stanford	1947—Holy Cross
1943—Wyoming	1948—Kentucky

NATIONAL INVITATION CHAMPIONS

(Madison Square Garden Tournament)

1938—Temple	1943—St. John's (Brooklyn)
1939—Long Island U.	1944—St. John's (Brooklyn)
1940—Colorado	1945—DePaul
1941—Long Island U.	1946—Kentucky
1942—West Virginia	1947—Utah
	1948—St. Louis

FINAL 1947-48 CONFERENCE STANDINGS

EASTERN INTERCOLLEGIATE LEAGUE

Won Lost		Won Lost	
Columbia.....	11 1	Pennsylvania.....	5 7
Cornell.....	9 3	Yale.....	4 8
Dartmouth.....	6 6	Harvard.....	1 11
Princeton.....	6 6		

BIG NINE

Michigan.....	10 2	Ohio State.....	5 7
Iowa.....	8 4	Minnesota.....	5 7
Wisconsin.....	7 5	Indiana.....	3 9
Illinois.....	7 5	Northwestern.....	3 9
Purdue.....	6 6		

MISSOURI VALLEY

Oklahoma A. & M.....	10 0	Creighton.....	4 6
St. Louis.....	8 2	Tulsa.....	2 8
Drake.....	5 5	Wichita.....	1 9

OTHER INTERCOLLEGIATE CHAMPIONS, 1948

SOUTHEASTERN CONFERENCE—Kentucky.
SOUTHERN CONFERENCE—North Carolina State.
SKYLINE CONFERENCE—Brigham Young.
BORDER CONFERENCE—Arizona.
MIDWEST CONFERENCE—Beloit.
NATIONAL ASSOCIATION (N. A. I. B.)—Louisville.
COLORED A. A.—West Virginia State.

A. A. U. CHAMPIONS, 1948

MEN—Phillips 66 Oilers, Bartlesville, Okla.
WOMEN—Nashville (Tenn.) Goldblumes

PACIFIC COAST

NORTHERN DIVISION		SOUTHERN DIVISION	
Won Lost		Won Lost	
*Washington.....	10 6	California.....	11 1
Oregon State.....	10 6	So. California.....	7 5
Washington St.....	9 7	U. C. L. A.....	3 9
Oregon.....	8 8	Stanford.....	3 9
Idaho.....	3 13		

*Won divisional and title play-offs.

BIG SEVEN

Kansas State.....	9 3	Nebraska.....	5 7
Missouri.....	7 5	Colorado.....	4 8
Oklahoma.....	7 5	Kansas.....	4 8
Iowa State.....	6 6		

SOUTHWEST

Baylor.....	11 1	So. Methodist.....	5 7
Texas.....	9 3	Texas A. & M.....	2 10
Arkansas.....	8 4	Texas Christian..	1 11
Rice.....	6 6		

ALL-AMERICA TEAM, 1948

(Associated Press poll)

Name and college	Age	Class
Ralph Beard, Kentucky	20	Junior
Ed Macauley, St. Louis	19	Junior
Kevin O'Shea, Notre Dame	22	Sophomore
Murray Wier, Iowa	21	Senior
Jim McIntyre, Minnesota	20	Junior

Professional Basketball

ASSOCIATION OF AMERICA

Source: Walter Kennedy, Publicity Director, Basketball Association of America.

FINAL 1947-48 STANDING OF THE CLUBS

(Regular season)

WESTERN DIVISION

	Won	Lost	Pct.
St. Louis Bombers.....	29	19	.604
(t) Baltimore Bullets.....	28	20	.583
Chicago Stags.....	28	20	.583
Washington Capitols.....	28	20	.583

EASTERN DIVISION

Philadelphia Warriors.....	27	21	.563
New York Knickerbockers.....	26	22	.542
Boston Celtics.....	20	28	.417
Providence Steamrollers.....	6	42	.125

(t) Won title playoffs.

LEADING SCORERS

(Regular season)

Player and club	Games	Goals	Fouls	Pts.
Zaslofsky, Chicago.....	48	373	261	1007
Fulks, Philadelphia.....	43	326	297	949
Sadowski, Boston.....	47	308	294	910
Feerick, Washington.....	48	293	189	775
Miassek, Chicago.....	48	263	190	716
Braun, New York.....	47	276	119	671
Logan, St. Louis.....	48	221	202	644
Palmer, New York.....	48	224	174	622
Rocha, St. Louis.....	48	232	147	611
Scolari, Washington.....	47	229	131	589

AMERICAN LEAGUE

Source: John J. O'Brien, President, American Basketball League.

FINAL 1947-48 STANDING OF THE CLUBS

(Regular season)

	Won	Lost	Pct.
(t) Wilkes-Barre (Pa.) Barons.....	26	8	.764
Paterson (N. J.) Crescents.....	19	16	.543
Trenton (N. J.) Tigers.....	17	15	.531
*Scranton (Pa.) Miners.....	16	16	.500
†Hartford (Conn.) Hurricanes.....	11	12	.478
†Philadelphia Sphas.....	13	19	.406
Brooklyn Gothams.....	8	20	.286
†Lancaster (Pa.) Roses.....	1	5	.166

(t) Won title playoffs.

*Jersey City franchise transferred to Scranton Jan. 28, 1948.

†Acquired Elizabeth (N. J.) franchise Dec. 19, 1947.

†Franchise terminated Dec. 4, 1947.

LEADING SCORERS

(Regular season)

Player and club	Games	Goals	Fouls	Points
Ostrowski, Wilkes-Barre.....	31	214	133	561
Bill Chanecka, Wilkes-Barre.....	30	188	129	505
Morganthaler, Philadelphia..	28	167	147	481
Powers, Paterson.....	35	128	223	479
Tanitsky, Philadelphia.....	32	155	90	400
Boyle, Trenton.....	32	112	154	378
Wallace, Scranton.....	15	129	69	327
Rullo, Philadelphia.....	30	129	43	301
Hanauer, Wilkes-Barre.....	33	111	70	292
Baltimore, Wilkes-Barre.....	34	119	50	288

NATIONAL LEAGUE

Source: National Basketball League.

FINAL 1947-48 STANDING OF THE CLUBS

(Regular season)

WESTERN DIVISION

	Won	Lost	Pct.
(t) Minneapolis Lakers.....	43	17	.717
Tri Cities Blackhawks.....	30	30	.500
Oshkosh All Stars.....	29	31	.475
Indianapolis Kautskys.....	24	35	.407
Sheboygan Redskins.....	23	37	.383

EASTERN DIVISION

Rochester Royals.....	44	16	.733
Anderson Duffey Packers.....	42	18	.700
Fort Wayne Zollner Pistons.....	40	20	.667
Syracuse Nationals.....	24	36	.400
Toledo Jeeps.....	22	37	.373
Flint Dow A. C.'s.....	8	52	.133

(t) Won title playoffs.

LEADING SCORERS

(Regular season)

Player and club	Games	Goals	Fouls	Points
Mikan, Minneapolis.....	56	406	383	1195
Otten, Tri Cities.....	60	282	260	824
Risen, Rochester.....	59	275	237	787
Calihan, Flint.....	55	265	255	785
Todorovich, Sheboygan.....	60	277	225	779
Pollard, Minneapolis.....	59	310	140	760
Englund, Oshkosh.....	58	246	244	734
Von Nieda, Tri Cities.....	60	276	174	726
Tidrick, Toledo.....	59	267	189	723
Homer, Syracuse.....	56	250	198	698

Champions

1938 Oshkosh	1944 Fort Wayne
1939 Akron	1945 Fort Wayne
1940 Akron	1946 Rochester
1941 Oshkosh	1947 Rochester
1942 Oshkosh	1948 Minneapolis
1943 Fort Wayne	

AMERICAN LEAGUE CHAMPIONS

1926—Cleveland Rosenblums
1927—Brooklyn Original Celtics
1928—Brooklyn Original Celtics
1929—Cleveland Rosenblums
1930—Cleveland Rosenblums
1931—Brooklyn Visitations
1932—No competition
1933—No competition
1934—Philadelphia Hebrews
1935—Brooklyn Visitations
1936—Philadelphia Hebrews
1937—Philadelphia Hebrews
1938—Jersey Reds
1939—New York Jewels
1940—Philadelphia Sphas
1941—Philadelphia Sphas
1942—Wilmington
1943—Philadelphia Sphas
1944—Wilmington Bombers
1945—Philadelphia Sphas
1946—Baltimore Bullets
1947—Trenton Tigers
1948—Wilkes-Barre Barons

ROWING

Rowing goes back so far in history that there is no possibility of tracing it to any particular aboriginal source. The oldest rowing race still on the calendar is the "Doggett's Coat and Badge" contest among professional watermen of the Thames (England) that began in 1715. The first Oxford-Cambridge race was held at Henley in 1829. Competitive rowing in the United States began with matches between boats rowed by professional oarsmen of the New York water front. They were oarsmen who rowed the small boats that plied as ferries from Manhattan Island to Brooklyn and return, or who rowed salesmen down the harbor to meet ships arriving from Europe. Since the first salesman to meet an incoming ship had some advantage over his rivals, there was keen competition in the bidding for fast boats and the best oarsmen. This gave rise to match races for a purse or a side bet on many occasions. The first of such races was held in June, 1811, in four-oared gigs.

Amateur boat clubs sprang up in the United States between 1820 and 1830 and seven students of Yale joined together to purchase a four-oared lap-streak gig in 1843. The first Harvard-Yale race was held Aug. 3, 1852, on Lake Winnepesaukee, N. H. The first time an American college crew went abroad was in 1869 when Harvard challenged Oxford and was defeated on the Thames. There were early college rowing races on Lake Quinsigamond, near Worcester, Mass., and on Saratoga Lake, N. Y., but the Intercollegiate Rowing Association, in 1895, settled on the Hudson, at Poughkeepsie, as the setting for the annual "Poughkeepsie Regatta". The National Association of Amateur Oarsmen, organized in 1872, has conducted annual championship regattas since that time. The first rowing races were held with lap-streak gigs but shells came into general favor about a century ago. The outrigger was invented in 1830 by Clasper, an Englishman. Yale used the sliding seat in 1870.

Rowing Statistics

Source: From *American Rowing*. Copyright by Robert F. Kelley; courtesy of G. P. Putnam's Sons.

Yale-Harvard Varsity Race Record

Rowed at Centre Harbor, N. H., in 1852; Springfield, Mass., in 1855, 1872-73, 1876-77; Worcester, Mass., 1859 to 1870; Saratoga Lake, N. Y., 1874-75; New London, Conn., 1878 to 1895, 1898 to 1916, 1919 to 1941, 1947, and 1948; triangular race at Poughkeepsie, N. Y., in 1897 with Cornell victor in 20:34; Derby, Conn., in 1918, 1942, and Boston, Mass., in 1946. Course was 2 miles in 1852; 3 miles from 1855 to 1875, and 4 miles thereafter.

Year	Winner	Time	Year	Winner	Time	Year	Winner	Time
1852	Harvard	1	1890	Yale	21:29	1919 ⁶	Yale	21:42½
1855	Harvard	22:00	1891	Harvard	21:23	1920	Harvard	23:11
1859	Harvard	19:18	1892	Yale	20:48	1921	Yale	20:41
1860	Harvard	18:53	1893	Yale	25:01½	1922	Yale	21:53
1864	Yale	19:01	1894	Yale	23:45½	1923	Yale	22:10
1865	Yale	18:42½	1895	Yale	21:30	1924	Yale	21:58¾
1866	Harvard	18:43¼	1897	Yale	20:44	1925	Yale	20:26
1867	Harvard	18:12¾	1898	Yale	24:02	1926	Yale	20:14¾
1868	Harvard	17:48½	1899	Harvard	20:52½	1927	Harvard	22:35½
1869	Harvard	18:02	1900	Yale	21:12¾	1928	Yale	20:21¾
1870	Harvard	20:30 ²	1901	Yale	23:37	1929	Yale	21:20
1872	Harvard	16:57	1902	Yale	20:20	1930	Yale	20:09½
1873	Yale	16:59	1903	Yale	20:19¾	1931	Harvard	22:21
1874 ³	Harvard	16:56	1904	Yale	21:40½	1932	Harvard	21:29
1875	Harvard	17:05	1905	Yale	22:33½	1933	Harvard	22:46¾
1876	Yale	22:02	1906	Harvard	23:02	1934	Yale	19:51¾
1877	Harvard	24:36	1907	Yale	21:10	1935	Yale	20:19
1878	Harvard	20:44¾	1908 ⁴	Harvard	24:10	1936	Harvard	20:19
1879	Harvard	22:15	1909	Harvard	21:50	1937 ⁷	Harvard	20:02
1880	Yale	24:27	1910	Harvard	20:46½	1938	Harvard	20:20
1881	Yale	22:13	1911	Harvard	22:44	1939	Harvard	20:48¾
1882	Harvard	20:47½	1912	Harvard	21:43½	1940	Harvard	21:38
1883	Harvard	25:46½	1913	Harvard	21:42	1941	Harvard	20:40
1884	Yale	20:31	1914	Yale	21:16	1942 ⁸	Harvard	10:09¾
1885	Harvard	25:15½	1915	Yale	20:52	1943-45	No races	
1886	Yale	20:42	1916	Harvard	20:02	1946 ⁹	Harvard	9:18
1887	Yale	22:56	1917	No race		1947	Harvard	20:40
1888	Yale	20:10	1918 ⁵	Harvard	10:58	1948 ¹⁰	Harvard	19:21¾
1889	Yale	21:30						

¹Harvard won by 3 to 4 lengths. ²Yale ran into Harvard at turn and was disqualified. ³Yale did not finish, being disabled in collision. ⁴Yale stroke taken from shell near 3-mile mark. ⁵Race was informal; rowed at 2 miles on Housatonic. ⁶Course was 110 feet less than 4 miles. ⁷Both crews broke upstream record. ⁸Rowed at 2 miles. ⁹Rowed at 1¼ miles. ¹⁰Both crews broke downstream record.

POUGHKEEPSIE REGATTA RECORD

(Varsity eight-oared shells—4 miles)

Rowed on Saratoga Lake (3 miles) 1898. Rowed on Lake Cayuga, Ithaca, N. Y. (2 miles) 1920. Racing suspended in 1917, 1918, 1919, 1933, and 1942 to 1946, inclusive. Rowed at 3 miles from 1921 to 1924, inclusive, 1947, and in 1948.

Year	Time	First	Second	Third	Fourth	Fifth	Sixth
1895	21:25	Columbia	Cornell				
1896	19:59	Cornell	Harvard	Pennsylvania	Columbia		
1897	20:47½	Cornell	Columbia				
1898	15:51½	Pennsylvania	Cornell	Wisconsin	Columbia		
1899	20:4	Pennsylvania	Wisconsin	Cornell	Columbia		
1900	19:44½	Pennsylvania	Wisconsin	Cornell	Columbia	Georgetown	
1901	18:53½	Cornell	Columbia	Wisconsin	Georgetown	Syracuse	Pennsylvania
1902	19:5½	Cornell	Wisconsin	Columbia	Pennsylvania	Syracuse	Georgetown
1903	18:57	Cornell	Georgetown	Wisconsin	Pennsylvania	Syracuse	Columbia
1904	20:22½	Syracuse	Cornell	Pennsylvania	Columbia	Georgetown	Wisconsin
1905	20:29	Cornell	Syracuse	Georgetown	Columbia	Pennsylvania	Wisconsin
1906	19:36½	Cornell	Pennsylvania	Syracuse	Wisconsin	Columbia	Georgetown
1907	20:2½	Cornell	Columbia	Navy	Pennsylvania	Wisconsin	Georgetown
1908	19:24½	Syracuse	Columbia	Cornell	Pennsylvania	Wisconsin	
1909	19:2	Cornell	Columbia	Syracuse	Wisconsin	Pennsylvania	
1910	20:42½	Cornell	Pennsylvania	Columbia	Syracuse	Wisconsin	
1911	20:10½	Cornell	Columbia	Pennsylvania	Wisconsin	Syracuse	
1912	19:31½	Cornell	Wisconsin	Columbia	Syracuse	Pennsylvania	Stanford
1913	19:28½	Syracuse	Cornell	Washington	Wisconsin	Columbia	Pennsylvania
1914	19:37½	Columbia	Pennsylvania	Cornell	Syracuse	Washington	Wisconsin
1915	19:36½	Cornell	Stanford	Syracuse	Columbia	Pennsylvania	
1916	20:15½	Syracuse	Cornell	Columbia	Pennsylvania		
1920	11:2½	Syracuse	Cornell	Columbia	Pennsylvania		
1921	14:7	Navy	California	Cornell	Pennsylvania	Syracuse	Columbia
1922*	13:33½	Navy	Washington	Syracuse	Cornell	Columbia	Pennsylvania
1923	14:3½	Washington	Navy	Columbia	Syracuse	Cornell	Pennsylvania
1924	15:2	Washington	Wisconsin	Cornell	Pennsylvania	Syracuse	Columbia
1925	19:24½	Navy	Washington	Wisconsin	Pennsylvania	Cornell	Syracuse
1926	19:28½	Washington	Navy	Syracuse	Pennsylvania	Columbia	California
1927	20:57	Columbia	Washington	California	Navy	Cornell	Syracuse
1928	18:35½	California	Columbia	Washington	Cornell	Navy	Syracuse
1929	22:58	Columbia	Washington	Pennsylvania	Navy	Wisconsin	
1930	21:42	Cornell	Syracuse	M. I. T.	California	Columbia	Washington
1931	18:54½	Navy	Cornell	Washington	California	Syracuse	Pennsylvania
1932	19:55	California	Cornell	Washington	Navy	Syracuse	Columbia
1934	19:44	California	Washington	Navy	Cornell	Pennsylvania	Syracuse
1935	18:52	California	Cornell	Washington	Navy	Syracuse	Pennsylvania
1936	19:3½	Washington	California	Navy	Columbia	Cornell	Pennsylvania
1937	18:33½	Washington	Navy	Cornell	Syracuse	California	Columbia
1938	18:19	Navy	California	Washington	Columbia	Wisconsin	Cornell
1939†	18:12½	California	Washington	Navy	Cornell	Syracuse	Wisconsin
1940	22:42	Washington	Cornell	Syracuse	Navy	California	Columbia
1941	18:53½	Washington	California	Cornell	Syracuse	Princeton	Wisconsin
1947	13:59 1/5	Navy	Cornell	Washington	California	Princeton	Syracuse
1948	14:06½	Washington	California	Navy	Cornell	M.I.T.	Princeton

*Record for three miles. †Record for four miles.

Seventh	Eighth	Swamped
1925—Columbia	1926—Cornell	1895—Pennsylvania
1926—Wisconsin	1930—Wisconsin	1929—Syracuse
1927—Pennsylvania	1931—Wisconsin	1929—California
1928—Pennsylvania	1932—M. I. T.	1929—Cornell
1930—Pennsylvania	1940—Princeton	1930—Navy
1931—Columbia	1941—M. I. T.	
1932—Pennsylvania	1947—M. I. T.	
1934—Columbia	1948—Wisconsin	
1935—Columbia	Ninth	
1936—Syracuse	1931—M. I. T.	
1937—Wisconsin	1941—Columbia	
1938—Syracuse	1947—Pennsylvania	
1939—Columbia	1948—Syracuse	
1940—Wisconsin	Tenth	
1941—Rutgers	1947—Rutgers	
1947—Wisconsin	1948—Columbia	
1948—Pennsylvania	Eleventh	
	1947—Columbia	
	1948—Rutgers	

Other Poughkeepsie Results, 1948

JUNIOR VARSITY RACE—3 MILES—1, Washington (14:28.6); 2, California; 3, Navy; 4, Pennsylvania; 5, Columbia; 6, Cornell; 7, M.I.T.; 8, Syracuse.

FRESHMAN RACE—2 MILES—1, Washington (9:46.9); 2, Navy; 3, Wisconsin; 4, M.I.T.; 5, Princeton; 6, Cornell; 7, Columbia; 8, Rutgers; 9, Pennsylvania; 10, Syracuse.

Harvard-Yale

JUNIOR VARSITY RACE—2 MILES—Harvard (9:30)

FRESHMAN RACE—2 MILES—Harvard (9:34)

CYCLING

THE ORIGIN and early history of the sport of cycling probably should be sought in the law volumes that contain the court records of decisions in patent cases. There was much dispute and litigation over the priority of inventions and improvements in the development of the bicycle. The fundamental idea of a wheeled frame on which a man could stand or sit and propel himself along a road goes back as far as the time of the Ptolemies in Egypt, but nothing progressive was done about it until a Frenchman named de Sivrac, in 1769, invented a tricycle on which he sat and rolled along by pushing his feet against the ground. There were various two-wheeled and three-wheeled improvements developed by French, German and English experimenters in the next century or so. The frames were better; steering with the front wheel was a new feature; handlebars were of more convenient design and adjustable seats were added. But the rider still pushed himself along with his feet until, about 1820, somebody had the bright idea of rotating the front wheel with a geared device, the rider furnishing the power by

pushing and pulling handlebars mounted on a spindle. Pedals came along about 1840 and, in the case of bicycles, were attached to the front wheel that grew to be much larger than the rear wheel. Solid rubber tires began to replace iron tires in 1869.

There was a long legal dispute about credit for the invention of the "safety bicycle" with two wheels of equal size and pedals attached to a sprocket that, through gears and a chain, applied power to the rear wheel but, in any case, the "safety" or modern bicycle had just about driven the old "high-wheeler" off the roads by 1890. Pneumatic tires were invented in 1888 by J. B. Dunlop, a Scotsman who was a practising veterinarian in Belfast, Ireland, and in a few years all the better bicycles were using pneumatic tires. But when Dunlop tried to patent his invention, it was discovered that a stranger named R. W. Thomson had taken out an English patent on such an idea in 1845. The Pickwick Bicycle Club, founded in London, 1870, was the first bicycle organization. The League of American Wheelmen was organized in 1880.

Cycling Statistics

WORLD RECORDS

Information received from H. H. England, editor of *Cycling*, London, England, is that the Union Cycliste Internationale, the ruling body, has decided to separate the records into two classes, amateur and professional, and reduce the list of world records. However, these records, which do not distinguish between amateur and professional, will stand until the new list is issued.

Unpaced Flying Start

Distance	Holder and country	Where made	Year	Time
$\frac{1}{4}$ mile	Ivor Lawson, United States	Salt Lake City	1906	0:23 $\frac{4}{5}$
500 meters	L. Michard, France	Bordeaux	1932	0:29 $\frac{4}{5}$
$\frac{1}{2}$ mile	A. J. Clark, Australia	Saltair, Utah	1908	0:50 $\frac{3}{5}$
1 kilometer	F. Battesini, Italy	Milan	1938	1:04 $\frac{3}{5}$
$\frac{3}{4}$ mile	Percy Lawrence, United States	Saltair, Utah	1908	1:23 $\frac{3}{5}$
1 mile	Alfred Gouillet, Australia	Salt Lake City	1912	1:51

Unpaced Standing Start

Distance	Holder and country	Where made	Year	Time
$\frac{1}{4}$ mile	L. Faucheux, France	Arcachon	1936	0:27 $\frac{4}{5}$
500 meters	L. Faucheux, France	Bordeaux	1934	0:33 $\frac{4}{5}$
$\frac{1}{2}$ mile	L. Michard, France	Bordeaux	1931	0:56 $\frac{1}{5}$
1 kilometer	F. Battesini, Italy	Milan	1938	1:10
$\frac{3}{4}$ mile	G. Renaudin, France	Bordeaux	1938	1:28
1 mile	G. Renaudin, France	Bordeaux	1938	2:00 $\frac{3}{5}$

Unrestricted Motor-Paced

			Miles	Yards
12 hours	Hubert Opperman, Australia	Melbourne	1932	477 770
24 hours	Hubert Opperman, Australia	Melbourne	1932	860 367

Human Paced—Standing Start

Distance	Holder and country	Where made	Year	Time
$\frac{1}{2}$ mile	J. S. Johnson, United States	Catford, England	1896	0:54 $\frac{2}{5}$
1 kilometer	R. Pottier, France	Paris	1904	1:08 $\frac{1}{5}$
$\frac{3}{4}$ mile	J. W. Stocks, Great Britain	London	1897	1:18 $\frac{3}{5}$
1 mile	Major Taylor, United States	Manhattan Beach, N. Y.	1898	1:41 $\frac{2}{5}$
50 miles	R. Palmer, Great Britain	London	1897	1:34:45 $\frac{4}{5}$

WORLD RECORDS—(cont.)

Hour Records

			Miles	Yards
paced	F. Coppi, Italy	Milan	1942	28 885
man-paced	J. W. Stocks, Great Britain	London	1897	32 1,085
motor-paced (u)	Leon Vanderstuyft, Belgium	Montlhéry	1928	76 504
motor-paced*	H. Breau, France	Montlhéry	1926	58 156
motor-paced†	H. Grant, Great Britain	Paris	1932	56 929

(u) Unrestricted motor paced. *First U. C. I. regulations (1920-29). †Second U. C. I. regulations (1930, etc.).

WORLD CHAMPIONS, 1948

Amateur Sprint—Mario Ghella, Italy
Professional Sprint—A. Van Vliet, Holland
Amateur Pursuit—G. Messina, Italy
Professional Pursuit—G. B. M. Schulte, Holland
Amateur Road—Harry Snell, Sweden
Professional Road—Alberic Schotte, Belgium
Professional Motor-Paced—J. J. Lamboley, France

U. S. AMATEUR CHAMPIONS, 1948

Senior—Ted Smith, Buffalo, N. Y.
Junior—Donald Clausen, Kenosha, Wis.
Girls—Doris Travani, Detroit
½ Mile—Frank Brillando, Chicago
Mile—Ted Smith
5 Miles—Joe Cironi, Jr., Delavan, Wis.
10 Miles—Warren Bare, Reading, Pa.

NATIONAL AMATEUR CHAMPIONS

Source: Amateur Bicycle League of America, Inc.

Year	Winner	Where held	Year	Winner	Where held
1935	Arthur Nieminsky, New York	Washington, D. C.	1935	Cecil Hursey, Georgia	Atlantic City
1936	Carl Hambacher, New Jersey	Atlantic City	1936	Jackie Simes, New Jersey	St. Louis
1937	Charles Barclay, California	Chicago	1937	Charles Bergna, New Jersey	Buffalo
1939	Charlie Winter, New York	Buffalo	1939	Martin Deras, California	Columbus
1940	Edward Merkner, Illinois	St. Louis	1940	Furman Kugler, New Jersey	Detroit
1941	Edward Merkner, Illinois	Philadelphia	1941	Marvin Thomson, Illinois	Pasadena, Calif.
1945	Jimmy Walhour, Jr., New York	Louisville	1945	Ted Smith, New York	Chicago
1946	R. J. Connor, District of Columbia	Kenosha, Wis.	1946	Don Hester, California	Columbus
1947	Sergio Matteini, New York	Newark, N. J.	1947	Ted Smith, New York	Philadelphia
1948	Bobby Thomas, Wisconsin	Kenosha, Wis.	1948	Ted Smith, New York	Kenosha, Wis.

AMATEUR BICYCLE LEAGUE OF AMERICA RECORDS

Source: George Knopf, Chairman, Records Committee, A.B.L.A.

ROAD COMPETITION—SCRATCH

Distance, mi.	Time	Record-holder and where made	Date
¼	:29¾	B. W. King, Atlantic City, N. J.	Sept. 16, 1922
¾	:38¾	Charles Winters, Chicago, Ill.	Sept. 8, 1923
½	1:04¾	John Leahy, Louisville, Ky.	Sept. 11, 1927
1	2:02	Henry Surman	
		R. L. Guthridge	
		S. C. Haberle	Aug. 8, 1908
2	4:46¾	Theodore Becker, Louisville, Ky.	Sept. 10, 1927
3	7:18¾	Don Sheldon, Columbus, Ohio	Aug. 18, 1946
5	11:59¾	Jack Heid, Columbus, Ohio	Aug. 17, 1946
10	23:59¾	Don Hester, Columbus, Ohio	Aug. 17, 1946
15	48:40¾	Jackie W. Simes, Jr., Washington, D. C.	Oct. 11, 1936
20	45:22	A. E. Wahl, Buffalo, N. Y.	July 4, 1921
25	1:02:14	Charles R. Thomas, Tonawanda, N. Y.	Sept. 6, 1937
50	2:02:00	Leo Adams, Buffalo, N. Y.	July 14, 1935
100	4:33:25¾	Louis Maltese, Union City, N. J., to South Philadelphia, Pa.	June 6, 1926
125	6:20:20¾	Don Sheldon, Old Westbury, N. Y.	Oct. 19, 1947

Tour de France to Bartali

Gino Bartali, a Frenchman, won cycling's classic Tour de France in 1948, covering 2,866 kilometers from Roubaix to Paris in 147 hours 10 minutes 36 seconds.

A. B. L. A. Formed in 1921

The Amateur Bicycle League of America, Inc., has governed amateur cycling in America since its formation in 1921. The organization is affiliated with the U.C.I.

AUTO RACING

THE FIRST automobiles on the road were erratic in action and driving them or even riding in them was considered a trifle risky, hence it became the sporting thing to do. Experimental excursions in crude cars gave rise to rivalry in speed over the rough roads of the Gay Nineties and this eventually led to formal contests, the first of which was a road race from Paris to Rouen in 1894, with 26 cars showing up at the starting line. Formal competition in the United States started with a road race in the Chicago district on Thanksgiving Day, 1895, and the winner, J. F. Duryea, covered the road distance of 54.36 miles at the astonishing average of 7.5 miles per hour!

Around 1900 Paris became the hub of road racing in Europe and each year there were raucous, dusty and dangerous races from Paris to Berlin, to Vienna, to Madrid

and other cities on the Continent. Accidents were so numerous to drivers and spectators that, after a gory group of mishaps in the forepart of the Paris-Madrid race of 1903, the contest was halted at Bordeaux by public authorities and all road racing was brought under control. Other kinds of auto racing were exposed to view. Some contests, including 24-hour races for stock models, were held on circular or oval tracks originally built for horse racing. Finally came the special racing strips for autos, including such famous autodromes as Brooklands in England and the Indianapolis Speedway in the United States.

As a test of engine and chassis under severe conditions and great strain, auto racing rendered invaluable assistance in the development of the motor car of today.

Auto Racing Statistics

Source: Contest Board, American Automobile Association, Washington, D. C.

National A. A. Champions

1909 Bert Dingley	1921 Tommy Milton	1933 Louis Meyer
1910 Ray Harroun	1922 Jimmy Murphy	1934 Bill Cummings
1911 Ralph Mulford	1923 Eddie Hearne	1935 Kelly Petillo
1912 Ralph DePalma	1924 Jimmy Murphy	1936 Mauri Rose
1913 Earl Cooper	1925 Peter DePaolo	1937 Wilbur Shaw
1914 Ralph DePalma	1926 Harry Hartz	1938 Floyd Roberts
1915 Earl Cooper	1927 Peter DePaolo	1939 Wilbur Shaw
1916 Dario Resta	1928 Louis Meyer	1940 Rex Mays
1917 Earl Cooper	1929 Louis Meyer	1941 Rex Mays
1918 Ralph Mulford	1930 Billy Arnold	1946 Ted Horn
1919 Howard Wilcox	1931 Louis Schneider	1947 Ted Horn
1920 Gaston Chevrolet	1932 Bob Carey	1948 Ted Horn

History of the One-Mile Speed Mark

The first recorded effort for one mile was made in 1898 by Chasseloup-Laubat, driving a Jentaud, in France. His average was 39.23 m.p.h. This was increased to 65.79 in 1899 by Jenatzy, also in France. The first man to travel better than 100 m.p.h. was Rigolly, in 1904, at 103.56 m.p.h., followed by Baras, with 104.53 in the same year. The first over 200 m.p.h. was Major H. O. D. Segrave, who drove at 203.790 in 1927 at Daytona, Florida.

In 1947 John Cobb of London became the first person to travel more than 400 m.p.h. on land. The Englishman accomplished the

feat on Sept. 16 at Bonneville, Utah, while raising the world mile record to 394.19 m.p.h. and the world kilometer (.62137 a mile) mark to 393.825 m.p.h.

Cobb's fastest mile was covered in 8.9 seconds and his average speed was 9.132 seconds. The Briton drove at the rate of 385.645 m.p.h. for the mile and 388.019 for the kilometer on the southward run, then increased his pace to 403.135 m.p.h. and 399.808, respectively, on the northward sprint, the best times ever recorded.

Those who drove 300 m.p.h. or better follow (all at Bonneville):

Date	Driver	Car	Average
Sept. 3, 1935	Sir Malcolm Campbell	Bluebird Special	301.129
Sept. 3, 1935	Sir Malcolm Campbell	Bluebird Special	301.13
Nov. 19, 1937	Capt. G. E. T. Eyston	Thunderbolt #1	311.42
Aug. 27, 1938	Capt. G. E. T. Eyston	Thunderbolt #1	345.5
Sept. 15, 1938	John Cobb	Rallton	350.2
Sept. 16, 1938	Capt. G. E. T. Eyston	Thunderbolt #1	357.5
Aug. 23, 1939	John Cobb	Rallton Red Lion	368.9
Sept. 16, 1947	John Cobb	Rallton Mobil Special	394.196

Indianapolis Speedway Winners

(500-mile race)

Year	Winner	Car	Second	Third	Time	Average
1	Harroun	Marmon	Mulford	Bruce-Brown	6:42:08	74.59
2	Dawson	National	Tetzloff	Hughes	6:21:08	78.70
3	Goux	Peugeot	Wishart	Merz	6:35:05	78.92
4	Thomas	Delarge	Duray	Guyot	6:03:45	82.47
5	DePalma	Mercedes	Resta	Anderson	5:33:55	89.84
6*	Resta	Peugeot	De Aleve	Mulford	3:34:17	83.26
7-18	No races					
19	Wilcox	Peugeot	Hearne	Goux	5:40:42	88.06
20	Chevrolet	Monroe	Thomas	Milton	5:38:32	88.50
21	Milton	Frontenac	Sarles	Ford	5:34:44	89.62
22	Murphy	Murphy Special	Hartz	Hearne	5:17:30	94.48
23	Milton	H. G. S. Special	Hartz	Murphy	5:29:50	90.95
24	Corum-Boyer	Duesenberg Special	Cooper	Murphy	5:05:23	98.23
25	DePaolo	Duesenberg Special	Lewis	Shafer	4:56:39	101.13
26†	Lockhart	Miller Special	Hartz	Woodbury	4:10:17	95.88
27	Souders	Duesenberg	Devore	Gulatta	5:07:33	97.54
28	Meyer	Miller Special	Moore	Souders	5:01:33	99.48
29	Keech	Simplex Special	Meyer	Gleason	5:07:25	97.58
30	Arnold	Hartz-Miller	Cantlon	Schneider	4:58:39	100.488
31	Schneider	Bowes Special	Frame	Hepburn	5:10:28	96.629
32	Frame	Miller Special	Wilcox	Bergere	4:48:03.79	104.144
33	Meyer	Miller Special	Shaw	Moore	4:48:12.75	104.089
34	Cummings	Miller Special	Rose	Moore	4:46:05.20	104.863
35	Petillo	Gilmore Special	Shaw	Cummings	4:42:22.71	106.240
36	Meyer	Ring Free Special	Horn	Mackenzie	4:35:03.39	109.069
37	Shaw	Shaw-Gilmore Spl.	Hepburn	Horn	4:24:07.80	113.580
38	Roberts	Burd Piston Reg. Spl.	Shaw	Miller	4:15:58.40	117.200
39	Shaw	Boyle Special	Snyder	Bergere	4:20:47.39	115.035
40	Shaw	Boyle Special	Mays	Rose	4:22:31.17	114.277
41	Rose-Davis†	Noc-Out Hose Clamp Special	Mays	Horn	4:20:36.24	115.117
42-45	No races					
46	Robson	Thorne Eng. Spl.	Jackson	Horn	4:21:16.71	114.820
47	Rose	Blue Crown	Holland	Horn	4:17:52.17	116.338
48	Rose	Spark Plug Special				
49	Rose	Blue Crown Special	Holland	Nalon	4:10:23.38	119.813

300 miles.

†Race ended at 400 miles owing to heavy rain.

‡Davis drove 180 miles, Rose 320.

WINNERS OF NATIONAL CHAMPIONSHIP RACES IN 1948

Date	Place	Distance, miles	Winner and home city	Car	Time
May 25	Arlington, Texas	100	Ted Horn, Paterson, N. J.	Ted Horn	1:17:0.56
July 31	Indianapolis	500	Mauri Rose, South Bend, Ind.	Blue Crown S.P.	4:10:23.33
Aug 6	Milwaukee	100	Emil Andres, Chicago, Ill.	Tuffy's Offy	1:10:19.73
Aug 20	Langhorne, Pa.	100	Walt Brown, Massapequa Park, N. Y.	Kurtis Kraft	1:06:55.66
Sept. 15	Milwaukee	100	Johnny Mantz, Long Beach, Calif.	Agabashian	1:10:19.08
Sept. 21	Springfield, Ill.	100	Ted Horn, Paterson, N. J.	Ted Horn	1:06:17.03
Sept. 29	Milwaukee	200	Myron Fohr, Milwaukee, Wis.	Marchese	2:18:21.21
			Tony Bettenhausen, Tinley Park, Ill.		
Oct. 4	Du Quoin, Ill.	100	Lee Wallard, Schenectady, N. Y.	Iddings	1:07:53.28
Oct. 6	Atlanta	100	Mel Hansen, Los Angeles, Calif.	Carter	1:15:41.00
Oct. 6	Pike's Peak, Colo.	Hill climb	Al Rogers, San Francisco, Calif.	Coniff	15:49.75
Oct. 19	Springfield, Ill.	100	Myron Fohr, Milwaukee, Wis.	Marchese	1:07:38.78
Oct. 30	Du Quoin, Ill.	100	Johnny Parsons, Los Angeles, Calif.	Kurtis Kraft	1:11:47.70

Carter Midget Auto Race Victor

Neil Carter of Toledo won the 100-mile national A. A. A. midget auto championship race at the Langhorne (Pa.) Speedway Oct. 11. His time was 1:03:34.17. Other leading finishers: 2, Mike Joseph, Philadelphia; 3, Ray Knepper, St. Louis; 4, Manuel Gulo, Burbank, Calif.; 5, Charley Miller, Camden, N. J.

Isais Retains Horseshoe Crown

Fernando Isais of Los Angeles, with 29 victories and 2 defeats, successfully defended his world horseshoe pitching title in the 1948 tournament, held at Milwaukee. Casey Jones of Waukesha, Wis., the runner-up, had a ringer percentage of 87.4, a world record.

BOWLING

THE GAME of bowling that is the favorite sport of millions of "keglers" in the United States is an indoor modification of the more ancient outdoor game that survives as lawn bowling. The outdoor game is prehistoric in origin and probably goes back to Primitive Man and round stones that were rolled at some target. It is believed that a game something like nine-pins was popular among the Dutch, Swiss and Germans as long ago as A.D. 1200 at which time the game was played outdoors with an alley consisting of a single plank 12 to 18 inches wide along which was rolled a ball toward three rows of three pins each placed at the far end of the alley. When the first indoor alleys were built and how the game was modified from time to time are matters of dispute. Much of the confusion arises from a lack of certainty as to which game is meant, "bowls" or "bowling", one with a "jack" and the other with "pins", in historical passages.

It is supposed that the early settlers of New Amsterdam (New York City) being Dutch, they brought their two bowling games with them. About a century ago the game of nine-pins was flourishing in the United States but so corrupted by gambling on matches that it was barred by law in New York and Connecticut. Since the law specifically barred "nine-pins", it was eventually evaded by adding another pin and thus legally making it a new game. The genius who thought up that simple method of outwitting the law and putting a popular game in motion once more remained modestly anonymous. With the increase in the number of pins, the old diamond formation of nine-pins was abandoned for the triangle set-up of ten-pins that remains the rule to this day. Various organizations were formed to make rules for bowling and supervise competition in the United States but none was successful until the American Bowling Congress, organized Sept. 9, 1895, became the ruling body.

Bowling Statistics

Source: Eli Whitney, Public Relations Director, American Bowling Congress.

American Bowling Congress Records

Type of record	Holder	Score	Year
High team total	Birk Bros., Chicago	3234	1932
High team game	Tea Shop, Milwaukee	1186	1922
High doubles total	G. Zunker—F. Benkovic, Milwaukee	1415	1932
High doubles game	J. Gworek—H. Knidowski, Buffalo	544	1942
High singles total	Larry Shotwell, Covington, Ky.	774	1932
High all events total	Max Stein, Belleville, Ill.	2070	1932
High 3 games in any event	Larry Shotwell, Covington, Ky.	774	1932

AMERICAN BOWLING CONGRESS CHAMPIONS

Year	Singles	Score	Doubles	Score
1929	Ad Unke, Milwaukee, Wis.	728	W. Klecz—P. Butler, Chicago, Ill.	135
1930	Larry Shotwell, Covington, Ky.	774	J. Devine—G. Heup, Beloit, Mich.	133
1931	Walter Lachowski, Erie, Pa.	712	E. Rafferty—C. Reilly, Philadelphia, Pa.	131
1932	Otto Nitschke, Cleveland, Ohio	731	F. Benkovic—C. Daw, Milwaukee, Wis.	135
1933	Earl Hewitt, Erie, Pa.	724	G. Zunker—F. Benkovic, Milwaukee, Wis.	141
1934	Jerry Vidro, Grand Rapids, Mich.	721	G. Rudolph—J. Ryan, Waukegan, Ill.	132
1935	Don Brokaw, Canton, Ohio	733	C. Summerix—H. Souers, Akron, Ohio	134
1936	Charles Warren, Springfield, Ill.	735	A. Slanina—M. Straka, Chicago, Ill.	134
1937	Gene Gagliardi, Mt. Vernon, N. Y.	749	V. Gibbs, Kansas City, Mo.—N. Burton, Dallas, Texas	135
1938	Knute Anderson, Moline, Ill.	746	D. Johnson—F. Snyder, Indianapolis, Ind.	133
1939	Jim Danek, Forest Park, Ill.	730	P. Icuss—M. Fowler, Steubenville, Ohio	140
1940	Ray Brown, Terre Haute, Ind.	742	H. Freitag—J. Sinke, Chicago, Ill.	134
1941	Fred Ruff, Belleville, Ill.	745	W. Lee—R. Farness, Madison, Wis.	134
1942	John Stanley, Cleveland, Ohio	756	E. Nowicki—G. Baier, Milwaukee, Wis.	137
1946	Leo Rollick, Los Angeles, Calif.	737	J. Gworek—H. Knidowski, Buffalo, N. Y.	136
1947	Junie McMahon, Chicago	740	Ed Doerr, Jr.—Len Springmeyer, St. Louis	135
1948	Lincoln Protich, Akron, Ohio	721	J. Towns—W. Sweeney, Chicago	136

American Bowling Congress Champions (cont.)

All-events	Score	Team	Score
Otto Stein, Jr., St. Louis, Mo.	1974	Hub Recreation, Joliet, Ill.	3063
George Morrison, Chicago, Ill.	1985	Graff & Son, Kalamazoo, Mich.	3100
Mike Mauser, Youngstown, Ohio.	1966	S & L Motor, Chicago, Ill.	3013
Hugh Stewart, Cincinnati, Ohio.	1980	Jefferson Clothiers, Dayton, Ohio.	3108
Gil Zunker, Milwaukee, Wis.	2060	Flaig Opticians, Covington, Ky.	3021
Walt Reppenhagen, Detroit, Mich.	1972	Strohs, Detroit, Mich.	3089
Ora Mayer, San Francisco, Calif.	2022	Wolfe Tire Service, Niagara Falls, N. Y.	3029
John Murphy, Indianapolis, Ind.	2006	Falls City Hi-Bru, Indianapolis, Ind.	3089
Max Stein, Belleville, Ill.	2070	Krakow Furniture, Detroit, Mich.	3118
Don Beatty, Jackson, Mich.	1978	Birk Bros., Chicago, Ill.	3234
Joe Wilman, Chicago, Ill.	2028	Fife Electric, Detroit, Mich.	3151
Fred Fisher, Buffalo, N. Y.	2001	Monarch Beer, Chicago, Ill.	3047
Harold Kelly, South Bend, Ind.	2013	Vogel Bros., Forest Park, Ill.	3065
Stan Moskal, Saginaw, Mich.	1973	Budweiser, Chicago, Ill.	3131
Joe Wilman, Chicago, Ill.	2054	Llo-da-mar Bowl, Santa Monica, Calif.	3023
Junie McMahon, Chicago.	1965	Eddie and Earl Linsz, Cleveland, Ohio.	3032
Ned Day, West Allis, Wis.	1979	Washington Shirts, Chicago.	3007

WOMAN'S INTERNATIONAL BOWLING CONGRESS CHAMPIONS

Source: Emma Phaler, Secretary, Woman's International Bowling Congress, Inc.

Singles	Score	Doubles	Score
Mrs. Agnes Higgins, Chicago	637	M. Smith—D. McQuade, Chicago	1123
Anita Rump, Fort Wayne	613	F. Trettin—M. Warmbier, Chicago	1173
Mrs. Myrtle Schulte, St. Louis	650	Z. Baker—G. Pomeroy, Detroit	1145
Audrey McVay, Kansas City, Mo.	668	M. Frank—E. Kirg, Chicago	1218
Mrs. Sally Twyford, Aurora, Ill.	628	V. Peters—M. Kite, Syracuse, N. Y.	1135
Marie Clemensen, Chicago	712	F. Trettin—D. McQuade, Chicago	1190
Marie Warmbier, Chicago	652	E. Hauffer—B. Simon, San Antonio	1219
Mrs. Ella Burmeister, Madison, Wis.	612	Mrs. A. Lindermann—Mrs. L. Baldy, Milwaukee	1116
Mrs. Anna Gottstine, Buffalo	647	L. Franke—G. Weber, Fort Wayne	1230
Mrs. Rose Warner, Waukegan, Ill.	622	F. Probert—E. Sablatnik, St. Louis	1215
Helen Hengstler, Detroit	626	C. Powers—B. Reus, Grand Rapids	1130
Mrs. Sally Twyford, Aurora, Ill.	626	T. Morris—D. Burmeister Miller, Chicago	1181
Nancy Huff, Los Angeles	662	J. Pittinger—M. J. Hogan, Los Angeles	1155
Tillie Taylor, Newark, N. J.	659	S. Hartrick—C. Allen, Detroit	1204
Val Mikiel, Detroit	682	V. Focazio—P. Dusher, Niagara Falls, N. Y.	1251
Agnes Junker, Indianapolis, Ind.	650	Candice Miller—E. Beard, Ft. Wayne, Ind.	1245
Shirlee Wernecke, Chicago	696	M. Cass, Alhambra—M. Mathews, Long Beach, Calif.	1188

All-events	Score	Team	Score
Mrs. Emma Jaeger, Toledo	1700	Harvey's Market Sq. Rec., Kansas City	2538
Mrs. Selva Twyford, Chicago	1727	Finucane Ladies, Chicago	2784
Mrs. M. Schulte, St. Louis	1742	Alberti Jewelers, Chicago	2748
Marie Warmbier, Chicago	1807	Martin Breit Realtors, St. Louis	2667
Mrs. Sally Twyford, Aurora, Ill.	1765	Alberti Jewelers, Chicago	2864
Mrs. Esther Ryan, Milwaukee	1763	Tommy Dolls Five, Cincinnati	2616
Marie Warmbier, Chicago	1911	Alberti Jewelers, Chicago	2765
Mrs. Ella Burmeister, Madison, Wis.	1683	Easty Five, Cleveland	2617
Mrs. Louise Stockdale, Detroit	1761	The Heil Uniform Heat, Milwaukee	2685
Dorothy Burmeister, Chicago	1843	The Heil Uniform Heat, Milwaukee	2706
Ruth Troy, Dayton, Ohio	1724	Kornitz Pure Oil, Milwaukee	2618
Mrs. Tess Morris, Chicago	1777	Logan Square Buicks, Chicago	2689
Mrs. Sally Twyford, Aurora, Ill.	1799	Rovick Bowling Shoes, Chicago	2661
Nina Van Camp, Chicago	1888	Logan Square Buicks, Chicago	2815
Catherine Fellmeth, Chicago	1835	Silver Seal Soda, St. Louis	2721
Marge Dardeen, Cincinnati	1826	Kornitz Pure Oil, Milwaukee	2987
Virgie Hupfer, Burlington, Iowa	1850	Kathryn Creme Pact, Chicago	2812

TOP BOWLERS FOR 1947-48 SEASON

(Selected in nation-wide polls by the National Bowling Writers Association.)

MEN		WOMEN	
Andy Varipapa	6. Walter Ward	1. Mrs. Val Mikel	6. Shirley Wernecke
Joe Wilman	7. Joe Norris	2. Phyllis Vogel	7. Connie Powers
Ned Day	8. Russ Gersonde	3. Ann Sabolowski	8. Dorothy Brichta
Buddy Bomar	9. Walter Johnson	4. Nina Van Camp	9. Marie Bedney
Paul Krumske	10. Tony Sparando	5. C. Fellmeth	10. Virgie Hupfer

DUCK PINS

Source: A. L. Ebersole, Executive Secretary, National Duck Pin Bowling Congress.

WORLD RECORDS (MEN)

Event and record holder	Score
Single game—Eddie Funaro, New Haven, Conn.	239
3-game set—Arthur Lemke, Lowell, Mass.	542
4-game set—John Miller-Nova Hamilton, Baltimore (tie)	610
5-game set—Astor Clarke, Washington, D. C.	782
6-game set—Mike Dziadik, Derby, Conn.	912
7-game set—Howard Parsons, Washington, D. C.	1,091
8-game set—Steve Witkowski, Middletown, Conn.	1,160
9-game set—Wally Pipp, Hartford, Conn.	1,318
10-game set—Winny Guerke, Baltimore	1,482
Season average—Hal Tucker, Baltimore	131-82

Doubles

Single game—W. Christiano-J. Silk, Norwalk, Conn.	352
3-game set—R. Haines-A. Felter, Baltimore	918
4-game set—W. Christiano-S. Pawlak, Westport, Conn.	1,120
5-game set—N. Hamilton-N. Pays, Baltimore	1,423
6-game set—N. Hamilton-W. Guerke, Baltimore	1,624
7-game set—S. Witkowski, Middletown, Conn.-J. Genovesi, Rockville, Conn.	1,938
8-game set—E. Campbell-L. Seim, Annapolis, Md.	2,128
9-game set—N. Hamilton-W. Guerke, Baltimore	2,431
10-game set—N. Hamilton-W. Guerke, Baltimore	2,720
Season average—P. Harrison-M. Rosenberg, Washington, D. C.	245-10

Teams

Team game—Winchester-Packard, Baltimore	773
3-game set—Hick's Cafe, Baltimore	2,123
5-game set—Kelly Buick, Baltimore	3,348
10-game set—Park Circle Motor, Baltimore	6,460
15-game set—Popular Club Rec., Baltimore	9,420
Consecutive wins—Franks Tavern, Washington	33
Season average—National Beer, Baltimore	638-42
3-man game—Middletown (Conn.) All-Stars	1,475
3-man set—Huguely's Bethesda (Md.) Stars	1,249
3-man 5-game set—C. Hildebrand, E. Pickus, N. Hamilton, Baltimore	1,957

NATIONAL CHAMPIONS, 1948

MEN

	Score
ALL EVENTS—Jack Karmezel, Devon, Conn.	1231
SINGLES—Mike Dziadik, Derby, Conn.	466
DOUBLES—Donald Cost-Frank Micalizzi, Washington, D. C.	808
TEAM—Davidson's Recreation, Baltimore	1978
MIXED DOUBLES—Helen Bourgery-Tony Carpenter, Woonsocket, R. I.	793

NATIONAL CANOEING CHAMPIONS, 1948

Source: American Canoe Association.

TEAM—Yonkers (N. Y.) C. C.

Single Blade

1-MAN—Albert Macknowski, Yonkers C. C.
TANDEM—Steve Lysak-Steve Macknowski, Yonkers C. C.
4-MAN—Yonkers C. C. (Albert Macknowski, Robert Dunford, Steve Macknowski, Steve Lysak)

Double Blade

1-MAN—Ernie Riedel, Pendleton C. C., New York
TANDEM—Frank Oldal-Adolph Springel, Pendleton C. C.
4-MAN—Pendleton C. C. (Frank Oldal, Ernie Riedel, John Ryan, Adolph Springel)

Sailing

DECKED—Irwin Tyson, White Plains, N. Y.
CRUISING—Douglas Cummings, Jr., Montclair, N. J.

WORLD RECORDS (WOMEN)

Event and record holder	Score
Single game—Mrs. Peggy Vreeland, West Haven, Conn.	20
3-game set—Flo Reynolds, Milford, Conn.	4
4-game set—Vickie Croggan, Washington, D. C.	56
5-game set—Maxine Allen, Durham, N. C.	72
6-game set—Ida Simmons, Norfolk, Va.	83
7-game set—Elizabeth Berger, Baltimore	97
8-game set—Naomi Zimmerman, Baltimore	1,000
9-game set—Ida Simmons, Norfolk, Va.	1,200
10-game set—Ida Simmons, Norfolk, Va.	1,330
Season average—Elizabeth Berger, Baltimore	122-

Doubles

Single game—A. Mullaney-M. Linthicum and B. James-E. Harris, Baltimore (tie)	310
3-game set—A. Levy-D. Smith, Norfolk, Va.	791
4-game set—E. Brose-T. McDonough, Baltimore	960
5-game set—A. Mullaney-A. Lucas, Baltimore	1,253
6-game set—E. Brewer-D. Wolford, Baltimore	1,417
7-game set—S. M. Easton-F. Oeschler, Baltimore	1,658
8-game set—T. McDonough-E. Brose, Baltimore	1,903
10-game set—A. Mullaney-K. Uta, Baltimore	2,274
Season average—N. Zimmerman-M. Tuckey, Baltimore	217

Teams

Team game—Aristocrat Dairy, Baltimore	680
3-game set—Virginia Dairy, Richmond, Va.	1,880
5-game set—Ida Simmons Girls, Norfolk, Va.	2,960
10-game set—Evening Star Champions, Washington, D. C.	5,430
Season average (105 games)—Franklin-Dubners, Baltimore	565-21
Consecutive wins—Bookies, Richmond, Va.	37
3-woman 7-game set—L. Simmons, J. White, E. Lieb, Baltimore	2,430

NATIONAL CHAMPIONS, 1948

WOMEN

	Score
ALL-EVENTS—Lillian Young, Baltimore	1180
SINGLES—Betty Bainbridge, Washington, D. C.	428
DOUBLES—Marie Anderson-Ruth Zentz, Baltimore	783
TEAM—Frank's Restaurant, Hartford, Conn.	1731

BRITISH SOCCER CHAMPIONS, 1948

Source: Jim Kelly, 2889 Bainbridge Ave., New York 58, N. Y.

INTERNATIONAL—England

English

LEAGUE (DIVISION I)—Arsenal
LEAGUE (DIVISION II)—Birmingham
LEAGUE (DIVISION III, SOUTH)—Queens Park Rangers
LEAGUE (DIVISION III, NORTH)—Lincoln City
CUP—Manchester United

Scottish

LEAGUE (DIVISION "A")—Hibernians
LEAGUE (DIVISION "B")—East Fife
CUP—Rangers

Welsh

LEAGUE—Lovells Athletic CUP—Lovells Athletic

Irish

LEAGUE—Belfast Celtic CUP—Linfield

Pilgrim Double Victor in 1906 Olympics

Paul Pilgrim of the N.Y.A.C. is the only runner to score a double in the 400- and 800-meter runs in the Olympic Games.

BILLIARDS

APPARENTLY nobody knows where billiards originated. Some trace the game back to ancient Greece or early Egyptian times; others insist it originated in France and England in medieval times. Shakespeare must have believed the Egyptian tale, because in *Antony and Cleopatra* he has Cleopatra saying: "Let's to billiards; come, Charmian." There is an illustration of Louis XIV of France playing billiards in 1644 and using a shovel-shaped stick to move the "cue ball" in motion, from which it is evident that the pointed cue was a later development.

Certainly the game was popular in England and on the Continent in the 17th

and 18th Centuries and early settlers in North America are supposed to have introduced the game here. How to apply "english" to a billiard ball was discovered by Jack Carr, an Englishman, in 1820. A Frenchman named Mingaud is credited with having invented the "draw" shot at about the same time and also to have devised leather tips for wooden cues. Championship competition, amateur and professional, is a modern development in billiards. The first formal professional tournament held in the United States took place in New York in 1863 with eight players competing. The first three-cushion tournament was held in St. Louis in 1878.

Billiards Statistics

Source: Chas. C. Peterson, President, Billiard Association of America.

World 18.2 Balk-line Champions

1905 Maurice Vignaux	1908 George B. Sutton	1921-22 Jake Schaefer, Jr.	1927 Willie Hoppe
1906 George F. Slosson	1909 Ora C. Morningstar	1923-24 Willie Hoppe	1927 Welker Cochran
1907 George B. Sutton	1909 Calvin Demarest	1925 Edward Horemans*	1928 Edward Horemans
1908 Willie Hoppe	1910 Harry P. Cline	1925 Jake Schaefer, Jr.	1929-33 Jake Schaefer, Jr.
Jacob Schaefer, Sr.	1910-20 Willie Hoppe	1926 Erich Hagenlacher	1934 Welker Cochran†
George F. Slosson			

Disputed match. Schaefer won play-off. †No competition since.

18.2 BALK-LINE RECORDS

Holder	Points	Year	Holder	Points
Jake Schaefer, Jr.. High run (game).....	400	1925	Jake Schaefer, Jr.. High grand average match...	93.75
Jake Schaefer, Jr.. High run match.....	432	1926	Jake Schaefer, Jr.. High run exhibition match...	585
Jake Schaefer, Jr.. High average.....	400	1926	Jake Schaefer, Jr.. High grand average 2400 pts.	120
Jake Schaefer, Jr.. High grand average tournament.....	57.14	1926	Welker Cochran... High run exhibition.....	684

World 18.1 Balk-line Champions

1905 Maurice Vignaux	1908 Jacob Schaefer, Sr.	1909-11 Willie Hoppe	1914-26 Willie Hoppe
1906 Willie Hoppe	1908 George B. Sutton*	1912 George B. Sutton	1926-27 Jake Schaefer, Jr.
1907 George B. Sutton	1908 George F. Slosson	1913 Ora C. Morningstar	1927 Willie Hoppe†
1908 Willie Hoppe			

By forfeit. †No competition since.

18.1 BALK-LINE RECORDS

Holder	Points	Year	Holder	Points
Jake Schaefer, Jr.. High run in match play.....	212	1927	Welker Cochran... High run in exhibition.....	353
Jake Schaefer, Jr.. High single average in match play.....	60	1927	Welker Cochran... High single average in exhibition.....	150
Jake Schaefer, Jr.. High grand average in match play.....	36	1927	Welker Cochran... High grand average in exhibition.....	61

FINAL STANDINGS IN 1948 NATIONAL TOURNAMENTS

(At Chicago, Feb. 27 to March 4)

Three Cushions				Pocket			
W.	L.	W.	L.	W.	L.	W.	L.
Guil Navarro.....	11 0	Tiff Denton.....	6 5	Andrew Ponzi*.....	9 2	Lou Russo.....	5 6
ing Crane.....	8 3	Andrew Ponzi.....	5 6	Arthur Cranfield.....	9 2	Michael Eufemia.....	5 6
Procita.....	7 4	Howard Lindley.....	4 7	Irving Crane.....	8 3	Walter Franklin.....	4 7
ny Irish.....	6 5	Jay Knapp.....	3 8	Bennie Allen.....	7 4	Al Coslosky.....	4 7
Navarra.....	6 5	Hollie Allen.....	2 9	Jimmy Caras.....	6 5	Don Tozer.....	3 8
ck Davis.....	6 5	Jack Davenport.....	2 9	Onofrio Lauri.....	6 5	Tom Boatman.....	0 11

*Won title on total point basis.

World Three-cushion Champions

1878	Leon Magnus	1912	Joe Carney	1919	Alfredo DeOro	1932	Augie Kieckhefer
1899	W. H. Catton	1912	John Horgan	1919	R. L. Cannafax	1933	Welker Cochran
1900	Eugene Carter	1913-14	Alfredo DeOro	1920	John Layton	1934	John Layton
1900	Lloyd Jevne	1915	George Moore	1921	Augie Kieckhefer	1935	Welker Cochran
1907	Harry P. Cline	1915	William H. Huey	1921-23	John Layton	1936	Willie Hoppe
1908	John Daly	1916	Alfredo DeOro	1923	Tiff Denton	1937	Welker Cochran
1908	Thomas Hueston	1916	Charles Ellis	1924	R. L. Cannafax	1938	Welker Cochran
1908-09	Alfredo DeOro	1916	Charles McCourt	1925	R. L. Cannafax	1939	Joe Chamaco
1910	Fred Eames	1916	Hugh Heal	1926-27	Otto Reisel	1940-44	Willie Hoppe
1910	Alfredo DeOro	1916	George Moore	1927	Augie Kieckhefer	1944	Welker Cochran
1910	John Daly	1917	Charles McCourt	1928	Otto Reisel	1945-46	Welker Cochran
1910	Thomas Hueston	1917	R. L. Cannafax	1928-29	John Layton	1947	Willie Hoppe
1911	John Daly	1917-18	Alfredo DeOro	1930	John Layton	1948	Willie Hoppe
1911	Alfredo DeOro	1918-19	Augie Kieckhefer	1931	Arthur Thurnblad		

THREE-CUSHION RECORDS

High Runs				High Averages—Best Game			
Year	Holder	Event	Points	Year	Holder	Points	Event
1915	Charles Morin	Tournament (Pro)	18	1925	Otto Reisel	50 in 16 innings	Interstate League
1919	Tiff Denton	Tournament (World)	17	1925	Otto Reisel	100 in 57 innings	Interstate League
1926	John Layton	Interstate League	18	1925	Otto Reisel	150 in 104 innings	Interstate League
1927	Willie Hoppe	American League	20	1930	John Layton	50 in 23 innings	Tournament
1928	Willie Hoppe	Exhibition vs. C. C. Peterson	25	1939	Joe Chamaco	50 in 23 innings	National League*
1930	Gus Copulos	Tournament (World)	17	1940	Jay N. Bozeman	50 in 23 innings	Tournament†
1936	Willie Hoppe	Match play	15	1945	Willie Hoppe	50 in 20 innings	Tournament†
1939	Joe Chamaco	National League*	18	1945	Welker Cochran	60 in 20 innings	Match
1940	Tiff Denton	Tournament†	17	1947	Willie Hoppe	60 in 21 innings	Match†
1945	Willie Hoppe	Match play†	20				

*No safeties. †Safeties. ‡No safeties; optional cue ball first shot of inning.

*No safeties. †Safeties. ‡No safeties; optional cue ball first shot of inning.

World Pocket Billiard Champions

1878-80	Cyrille Dion	1899-1900	Alfredo DeOro	1910	Thomas Hueston	1930-32	Ralph Greenleaf
1881	Gottlieb Wahlstrom	1901	Frank Sherman	1910	Jerome Keogh	1933-34	Erwin Rudolph
1882-83	Albert Frey	1901	Alfredo DeOro	1910-12	Alfredo DeOro	1935	Andrew Ponzi
1884	J. L. Malone	1902	William Clearwater	1912	R. J. Ralph	1936	James Caras
1886-87	Albert Frey	1902	Grant Eby	1913	Alfredo DeOro	1937	Ralph Greenleaf
1887	J. L. Malone (f)	1903	Alfredo DeOro	1913-15	Bennie Allen	1938	James Caras
1887-88	Alfredo DeOro	1904	Alfredo DeOro	1916	John Layton	1939	James Caras
1888	Frank Powers	1905	Jerome Keogh (f)	1916-18	Frank Taberski	1940	Andrew Ponzi (f)
1889	Albert Frey	1905	Alfredo DeOro	1919-24	Ralph Greenleaf	1941	Willie Mosconi (f)
1889	Alfredo DeOro	1905	Thomas Hueston (f)	1925	Frank Taberski	1941	Erwin Rudolph (f)
1890	H. Manning	1906	Thomas Hueston	1926	Ralph Greenleaf	1942	Irving Crane (m)
1891	Frank Powers (f)	1906	John Horgan	1926	Erwin Rudolph	1942	Willie Mosconi (f)
1892-94	Alfredo DeOro	1906	Jerome Keogh	1926	Thomas Hueston	1943	Andrew Ponzi (m)
1895	William Clearwater	1907	Thomas Hueston	1927	Frank Taberski	1944	Willie Mosconi (m)
1895	Alfredo DeOro	1908	Thomas Hueston	1927-28	Ralph Greenleaf	1945	Willie Mosconi
1896	Frank Stewart (f)	1908	Frank Sherman	1928	Frank Taberski	1946	Willie Mosconi
1897	Grant Eby	1908	Alfredo DeOro	1929	Ralph Greenleaf	1946	Irving Crane (f)
1897	Jerome Keogh	1909	Charles Weston	1929	Frank Taberski	1947	Willie Mosconi (m)
1898	William Clearwater	1909	John Kling	1930	Erwin Rudolph	1948	Willie Mosconi (m)
1898	Jerome Keogh						

(f) Forfeit. (l) League play. (t) Tourney. (m) Match.

POCKET BILLIARD RECORDS
(14.1 Championship Game)

Event	Points	Holder	Year	Event	Points	Holder	Year
Tournament—high run	126	Ralph Greenleaf	1929	Tournament—best game in			
Tournament—high run	125	Bennie Allen	1935	innings	2	Ralph Greenleaf	1929
Tournament—high run	125	George Kelly	1935	Tournament—best game in			
Tournament—high run	125	Willie Mosconi	1945	innings	2	Willie Mosconi	1945
Exhibition—high run	309	Irving Crane	1939	Match—high run for single			
Exhibition—high run	309	Willie Mosconi	1945	game	127	Willie Mosconi	1945
Tournament—high single game				Match—high run for single			
average	63	Ralph Greenleaf	1929	game	127	James Caras	1945
Tournament—high grand aver-				Match—high run in continuous			
age	11.02	Ralph Greenleaf	1929	play	153	Andrew Ponzi	1935

WORLD TITLE MATCHES IN 1948

Three Cushions

Willie Hoppe, champion, vs. Ezequiel Navarra

No.	1	2	3	4	5	6	7	8	9	Point total
Hoppe	50	50	50	50	50	50	50	50	50	450
Navarra	39	53	35	62	35	29	35	53	35	376

Pocket

Die Mosconi, champion, vs. Andrew Ponzi

No.	1	2	3	4	5	6	7	8	9	Point total
Mosconi	150	150	150	150	150	150	150	150	150	1,350
Ponzi	144	41	21	31	34	62	137	32	141	643

—H. A. Wright
—E. W. Gardner
—J. F. Poggenburg
—M. D. Brown
—Joseph Mayer
—E. W. Gardner
—Nathan Hall

National Amateur 18.2 Balk-line Champions

1916—C. Huston
1917—Dave McAndless
1918—Percy Collins
1919—C. Heddon
1920—E. T. Appleby
1921—Percy Collins
1922—E. T. Appleby*

1923—Percy Collins†
1924—E. T. Appleby
1925—F. S. Appleby
1926-28—John Clinton
1929—E. T. Appleby†
1929—Percy Collins†

1929—M. C. Walgren†
1930—Percy Collins
1931—E. T. Appleby
1932—Albert Poensgen§
1933—Albert Poensgen§
1934-40—Edmund Sousa

International champion. †National 18.1 champion—F. S. Appleby. ‡Amateur Billiard Association. §International champion.

National Amateur Three-cushion Champions

—Pierre Maupome
—Charles Morin
—Arthur Newman
—W. B. Huey
—Earl Lookabaugh
—Frank Flemming
—Robert M. Lord

1924—Frank Flemming
1925-26—Dr. A. J. Harris
1927—Dr. L. P. Macklin
1928—J. N. Bozeman
1929—Charles Jordan
1929—Max Shimon
1930—Joseph Hall

1930—Max Shimon
1930—R. B. Harper
1931—Frank Flemming
1931-35—Edward Lee
1936—Edward Lee*
1937—A. Primeau
1938—Gene Deardorff

1939—Gene Deardorff
1945-46—C. T. Vandenovert
1946—Edward Lee†
1946—Robert M. Lord†
1947—Robert M. Lord†
1948—Robert M. Lord†
1948—C. T. Vandenovert†

World champion. †Events limited to athletic clubs. ‡Match.

National Amateur Pocket Billiard Champions

—A. Hyman
—J. H. Shoemaker
—No tournament
—22—J. H. Shoemaker
—E. F. Reynolds
—J. H. Shoemaker

1925—Carl A. Vaughan
1926—Clarence Hurd
1927—J. H. Shoemaker
1928—J. Collins
1929—Cy. Yellin

1930—J. H. Shoemaker
1931—Robert Cole
1931—J. H. Shoemaker*
1932—E. Fagin
1932—J. H. Shoemaker*

1933—E. Fagin
1933—J. H. Shoemaker*
1934-35—J. H. Shoemaker
1936-37—E. C. Rogers
1938-40—Arthur Cranfield

by challenge.

Belgian Takes 3-Cushion Title

Gene Vingerhoedt of Belgium won the world amateur three-cushion billiard championship tourney, held last October at Buenos Aires, Argentina.

WINNERS OF DISTANCE YACHT RACES

Petersburg to Havana—Garner M. Tullis' VINDJAMMER II (ketch)
Newport to Bermuda—H. C. Taylor's SARUNA (yawl)
Chicago to Mackinac Island—George Sollett's ONKAHYA (yawl)
Chicago-Mackinac Trophy—L. L. Karas' PARARA MIA (yawl)
Detroit Huron to Mackinac Island—Ernest Strates' and Murray Knapp's BLITZEN (auxiliary cutter)
Lake Ontario 335-mile race—F. M. Temple's DIVILION (sloop)
Hamford-Vineyard—John M. Timken's KITTY HAWK (yawl)

INTERCOLLEGIATE CHAMPIONS, 1948

STRAIGHT RAIL—Gordon Howe, Wisconsin
THREE-CUSHION—Sol Askenaze, Wisconsin
POCKET—Jack Brown, Utah
COED KEYSHOT—Jeanne Lynch, Rhode Island State

Keyshot Team Champions

STRAIGHT RAIL—Ohio State
THREE CUSHION—Indiana
POCKET—Florida
COED—Rhode Island State

BOYS' CLUBS OF AMERICA CHAMPIONS

SENIOR—John Romano, Brooklyn
JUNIOR—Anthony Venuto, Philadelphia

BOBSLEDDING CHAMPIONS, 1948

NORTH AMERICAN FOUR-MAN—Majestic B. C., Lake Placid, N. Y. (Stanley Benham, Bill Casey, Jim Atkinson, William Trombley)
NORTH AMERICAN TWO-MAN—Saranac Lake (N. Y.) B. C. (Dick Surphlis-Henry Stern)
NATIONAL A. A. U. FOUR-MAN—Majestic B. C.
NATIONAL A. A. U. TWO-MAN—Saranac Lake B. C.

NEW YORK YACHT CLUB 1948 Cruise Winners

King's Cup—Henry S. Morgan's DJINN (sloop)
Astor Cup—Henry S. Morgan's DJINN
Navy Challenge Cups—A. N. Matthews' MANXMAN, George E. Roosevelt's MISTRESS, P. McKay Sturgess' SAPPHERE
Vice Commodore's Cups—Frank C. Paine's GYPSY, E. T. Rice's PUSSY WILLOW, Seth M. Milliken's THISTLE

ICE SKATING

Speed

WORLD RECORDS

Source: International Skating Union (I.S.U.).

MEN

Meters	Time	Recordholder and country	Where made	Date
500	41.8	H. Engnestangen, Norway	Davos, Switz	Feb. 5, 19
1,000	1:28.4	Cl. Thunberg, Finland	Davos, Switz	Jan. 11, 19
1,500	2:13.8	H. Engnestangen, Norway	Davos, Switz	Jan. 29, 19
3,000	4:45.7	Ake Seyffarth, Sweden	Davos, Switz	Feb. 3, 19
5,000	8:13.7	Ake Seyffarth, Sweden	Davos, Switz	Feb. 3, 19
10,000	17:01.5	Ch. Mathisen, Norway	Hamar, Norway	March 3, 19

WOMEN

500	46.4	Laila Schou-Nilsen, Norway	Davos, Switz	Jan. 30, 19
1,000	1:38.8	Laila Schou-Nilsen, Norway	Davos, Switz	Jan. 31, 19
1,500	2:38.1	Laila Schou-Nilsen, Norway	Oslo, Norway	Jan. 23, 19
3,000	5:29.6	Laila Schou-Nilsen, Norway	Davos, Switz	Jan. 30, 19
5,000	9:28.3	Laila Schou-Nilsen, Norway	Davos, Switz	Jan. 31, 19

SPEED SKATING CHAMPIONS, 1948

World

ALL-AROUND—Odd Lundberg, Norway.
 500 METERS—Konstantin Kurdjavitset, Russia.
 1,500 METERS—Johnny Werket, United States.
 5,000 METERS—Kees Broeckman, The Netherlands.
 10,000 METERS—Kees Broeckman.

European

ALL-AROUND—Reidar Liaklev, Norway.
 500 METERS—Bob Fitzgerald, Minneapolis, and Del Lamb, Milwaukee (tie).
 5,000 METERS—Kees Broeckman, The Netherlands.
 10,000 METERS—Reidar Liaklev, Norway.

North American

OUTDOOR

MEN—George Fischer, Chicago.
 WOMEN—Betty Mitchell, Winnipeg.

OUTDOOR INTERMEDIATE

BOYS'—Percy Murname, Flushing, N. Y.
 GIRLS'—Aldrina Lebel, Lake Placid, N. Y.

INDOOR

MEN—Al Broadhurst, Roslindale, Mass.
 WOMEN—Loraine Sabbe, Detroit.

United States

MEN—George Fischer, Chicago.
 WOMEN—Loraine Sabbe, Detroit.

NATIONAL SENIOR AMATEUR RECORDS

(Made in competition)

Source: Amateur Skating Union of the United States.

MEN'S OUTDOOR

Event	Time	Holder	Place	Date
220 yd.	18.1	Robert Fitzgerald	Minneapolis	1/10/43
440 yd.	35.4	Charles Gorman	Lake Placid	2/14/27
	35.4	Ken Bartholomew	St. Paul	1/25/42
	35.4	Robert Fitzgerald	Minneapolis	2/15/42
880 yd.	1:14.2	Robert Fitzgerald	Minneapolis	1/7/45
¾ mi.	1:55.8	Clas Thunberg	Saranac Lake	2/15/26
1 mi.	2:38.2	Clas Thunberg	Lake Placid	2/12/26
2 mi.	5:33.8	Eddie Schroeder	Minneapolis	1/30/34
3 mi.	8:19.6	Ross Robinson	Lake Placid	2/14/30
5 mi.	14:30.4	Ross Robinson	Lake Placid	2/12/27

MEN'S INDOOR

Event	Time	Holder	Place	Date
220 yd.	18	F. Robson	Boston	1/13/37
¾ mi.	23.8	C. Gorman	St. John's*	3/1/37
440 yd.	36.8	C. Gorman	St. John's	2/27/37
880 yd.	1:15.6	B. O'Sickey	Pittsburgh	3/1/37
¾ mi.	2:00.4	P. Johnston	Cleveland	3/2/37
1 mi.	2:41.2	Morris Wood-		
		F. Robson	Pittsburgh	2/13/37
2 mi.	5:54.8	R. Heckenbach	St. Paul	1/30/37
3 mi.	8:58.8	P. Johnston	Pittsburgh	2/19/37
4 mi.	13:41.8	Joe Moore	Brooklyn	2/7/37
5 mi.	15:42.2	F. Stack	Chicago	2/8/37

WOMEN'S OUTDOOR

220 yd.	20.2	Maddy Horn	Saranac Lake	2/11/39
440 yd.	39.4	L. Neitzel	Minneapolis	2/3/29
880 yd.	1:25.9	Maddy Horn	Escanaba*	1/13/40
2 mi.	2:17	Dot Franey	Minneapolis	1/16/37
1 mi.	3:06.1	Maddy Horn	Oconomowoc†	1/24/37

*Michigan. †Wisconsin.

WOMEN'S INDOOR

220 yd.	21.6	Dot Franey	St. Paul	2/15/37
440 yd.	41.6	Dot Franey	St. Paul	2/16/37
880 yd.	1:27	Leila B. Potter	Pittsburgh	3/6/37
¾ mi.	2:18.1	Kit Klein	Chicago	2/2/37
1 mi.	3:15.6	Maddy Horn	Chicago	4/1/37

*New Brunswick, Canada.

Figure Skating

Source: Art Goodfellow, Editor, *National Ice Skating Guide*,
110 East 42d St., New York 17, N. Y.

WORLD CHAMPIONS

Men	Women
Gilbert Fuchs, Germany	.....
Gustav Hugel, Austria	.....
H. Grenander, Sweden	.....
Gustav Hugel, Austria	.....
Gustav Hugel, Austria	.....
Ulrich Salchow, Sweden	.....
Ulrich Salchow, Sweden	.....
Ulrich Salchow, Sweden	.....
Ulrich Salchow, Sweden	.....
Gilbert Fuchs, Germany	Madge Syers, England
Ulrich Salchow, Sweden	Madge Syers, England
Ulrich Salchow, Sweden	Lily Kronberger, Hungary
Ulrich Salchow, Sweden	Lily Kronberger, Hungary
Ulrich Salchow, Sweden	Lily Kronberger, Hungary
Fritz Kachler, Austria	Meray Horvath, Hungary
Fritz Kachler, Austria	Meray Horvath, Hungary
Gosta Sandahl, Sweden	Meray Horvath, Hungary
21 No competition	No competition
Gillis Grafstrom, Sweden	Mrs. Szabo Plank, Austria
Fritz Kachler, Austria	Mrs. Szabo Plank, Austria
Gillis Grafstrom, Sweden	Mrs. Szabo Plank, Austria
Willi Boeckl, Austria	Mrs. Szabo Plank, Austria
Willi Boeckl, Austria	Mrs. Szabo Plank, Austria
Willi Boeckl, Austria	Sonja Henie, Norway
Willi Boeckl, Austria	Sonja Henie, Norway
Gillis Grafstrom, Sweden	Sonja Henie, Norway
Karl Schafer, Austria	Sonja Henie, Norway
Karl Schafer, Austria	Sonja Henie, Norway
Karl Schafer, Austria	Sonja Henie, Norway
Karl Schafer, Austria	Sonja Henie, Norway
Karl Schafer, Austria	Sonja Henie, Norway
Karl Schafer, Austria	Sonja Henie, Norway
Felix Kaspar, Austria	Cecilia Colledge, England
Felix Kaspar, Austria	Megan Taylor, England
Graham Sharp, England	Megan Taylor, England
1946 No competition	No competition
Hans Gerschweiler, Switzerland	Barbara A. Scott, Canada
Richard Button, United States	Barbara A. Scott, Canada

Other World Champions, 1948

PS—Micheline Lannoy-Pierre Baugniet, Belgium.

European

PS—Richard Button, United States.

PS—Barbara Ann Scott, Canada.

PS—Andrea Kekessy-Ede Kiraly, Hungary.

CONTRACT BRIDGE

Source: American Contract Bridge League.

WORLD MASTERS' CHAMPIONS, 1948

INDIVIDUAL—B. Jay Becker, New York

PS—S. Garton Churchill, Brooklyn-Cecil Head, New York

PS—M.-OF-FOUR—George Rapee, Samuel Stayman, Howard

PS—henken, New York; John L. Crawford, Philadelphia;

PS—Mrs. W. Wagar, Atlanta, Ga.

PS—ED TEAM-OF-FOUR—Charles H. Goren, Philadelphia;

PS—Mrs. Helen Sobel, New York; John L. Crawford, Mrs. W.

aggar

UNITED STATES CHAMPIONS

Year	Men	Women
1914	Norman Scott	Theresa Weld
1915-17	No competition	No competition
1918	Nathaniel Niles	Mrs. R. S. Beresford
1919	No competition	No competition
1920	Sherwin Badger	Theresa Weld
1921	Sherwin Badger	Theresa Blanchard
1922	Sherwin Badger	Theresa Blanchard
1923	Sherwin Badger	Theresa Blanchard
1924	Sherwin Badger	Theresa Blanchard
1925	Nathaniel Niles	Beatrix Loughran
1926	C. I. Christenson	Beatrix Loughran
1927	Nathaniel Niles	Beatrix Loughran
1928	Roger Turner	Maribel Y. Vinson
1929	Roger Turner	Maribel Y. Vinson
1930	Roger Turner	Maribel Y. Vinson
1931	Roger Turner	Maribel Y. Vinson
1932	Roger Turner	Maribel Y. Vinson
1933	Roger Turner	Maribel Y. Vinson
1934	Roger Turner	Suzanne Davis
1935	Robin Lee	Maribel Y. Vinson
1936	Robin Lee	Maribel Y. Vinson
1937	Robin Lee	Maribel Y. Vinson
1938	Robin Lee	Joan Tozzer
1939	Robin Lee	Joan Tozzer
1940	Eugene Turner	Joan Tozzer
1941	Eugene Turner	Jane Vaughn
1942	Bobby Specht	Jane V. Sullivan
1943	Arthur R. Vaughn, Jr.	Gretchen Merrill
1944	Omitted	Gretchen Merrill
1945	Omitted	Gretchen Merrill
1946	Richard Button	Gretchen Merrill
1947	Richard Button	Gretchen Merrill
1948	Richard Button	Gretchen Merrill

Other U. S. Champions, 1948

PAIRS—Karol Kennedy-Peter Kennedy, Seattle.

FOURS—St. Paul F. S. C. (Janet Gerhauser, Marilyn Thom-
sen, Marilyn Thomsen, John S. Nightingale).

GOLD DANCE—Lois Waring-Walter Bainbridge, Washing-
ton, D. C.

SILVER DANCE—Mary Firth, Seattle-Donald Laws, Washing-
ton.

JUNIOR

MEN—Hayes Alan Jenkins, Cleveland.

WOMEN—Virginia Baxter, Chicago.

PAIRS—Anne Davies-Carleton C. Hoffner, Washington.

NOVICE

MEN—Richard Dwyer, Los Angeles.

WOMEN—Josephine Barnum, Boston.

NATIONAL CHAMPIONS, 1948

INDIVIDUAL—Nathan Agran, Philadelphia

MEN'S PAIRS—Fred Hirsch, New York-Samuel Katz,
Milburn, N. J.

WOMEN'S PAIRS—Mrs. Max Gutman, Covington, Ky.-
Mrs. Leonard Goldstein, Cincinnati

KNOCKOUT TEAM-OF-FOUR—Robert Appleyard, William M.
Lichtenstein, Jay T. Feigus, Henry Sonnenblick, Alexander
Weiss, New York

MIXED TEAM-OF-FOUR—Mrs. John Rosekrans, San Francisco;
Waldemar von Zedtwitz, New York; Mr. and Mrs. Maurice
Seiler, Los Angeles

Addresses of Game and Fish Law Bureaus

Source: *Sports Afield*, 401-05 Second Ave. So., Minneapolis 1, Minn.

A letter to any conservation department listed below will bring a copy of the hunting laws or of the fishing laws that are current at the time of request:

- Alabama: Dept. of Conservation, Montgomery 4.
 Alaska: Alaska Game Comm., Juneau.
 Arizona: State Game Warden, Phoenix.
 Arkansas: Game and Fish Comm., Little Rock.
 California: Div. of Fish and Game, San Francisco 11.
 Colorado: Dept. of Game and Fish, Denver 11.
 Connecticut: Supt. of Fisheries and Game, Hartford.
 Delaware: Chief Game and Fish Warden, Dover.
 District of Columbia: Supt. of Metropolitan Police, Washington.
 Florida: Director, Game and Fresh Water Fish Comm., Tallahassee.
 Georgia: Director, Div. of Wildlife, Atlanta.
 Idaho: Dept. of Fish and Game, Boise.
 Illinois: Dept. of Conservation, Springfield.
 Indiana: Dept. of Conservation, Indianapolis 9.
 Iowa: State Conservation Comm., Des Moines 8.
 Kansas: Director of Fish and Game Comm., Pratt.
 Kentucky: Director, Game and Fish Div., Frankfort.
 Louisiana: Comm'r. of Wildlife and Fisheries, 126 Civil Courts Bldg., New Orleans 16.
 Maine: Comm'r. of Inland Fisheries and Game, State House, Augusta.
 Maryland: State Game Warden, 514 Munsey Bldg., Baltimore 2.
 Massachusetts: Director, Div. of Fisheries and Game, 15 Ashburton Pl., Boston.
 Michigan: Director, Dept. of Conservation, Lansing.
 Minnesota: Director, Div. of Game and Fish, Dept. of Conservation, St. Paul 1.
 Mississippi: Director of Conservation, Jackson.
 Missouri: Conservation Comm., Jefferson City.
 Montana: State Fish and Game Warden, Helena 3.
 Nebraska: Sec., Game, Forestration and Parks Comm., Lincoln 9.
 Nevada: Sec., State Fish and Game Comm., Reno.
 New Hampshire: Fish and Game Dept., Concord.
 New Jersey: Sec., Board of Fish and Game Comm'rs., Trenton.
 New Mexico: State Game Warden, Santa Fe.
 New York: Dept. of Conservation, 41 Broadway, Albany 7.
 North Carolina: Div. of Game and Inland Fisheries, Raleigh.
 North Dakota: Game and Fish Comm., Bismark.
 Ohio: Conservation Comm'r., Dept. of Agriculture, Columbus 15.
 Oklahoma: State Game and Fish Comm., Oklahoma City 5.
 Oregon: State Game Comm., 616 Oregon Bldg., Portland.
 Pennsylvania: Fish Comm., Harrisburg Game Comm., Harrisburg.
 Rhode Island: Div. of Fish and Game, State House, Providence.
 South Carolina: Chief Game Warden, Columbia.
 South Dakota: Director, Game, Fish and Parks Comm., Pierre.
 Tennessee: State Director of Game and Fish, 304 State Office Bldg., Nashville.
 Texas: Game, Fish, and Oyster Comm., Austin 14.
 Utah: Dir., Utah Fish and Game Comm., State Capitol Bldg., Salt Lake City.
 Vermont: Fish and Game Director, Montpelier.
 Virginia: Exec. Sec. Comm. of Game and Inland Fisheries, Richmond.
 Washington: Dept. of Game, 515 Smith Tower, Seattle 4.
 West Virginia: Conservation Comm., Charleston.
 Wisconsin: Conservation Director, Madison 2.
 Wyoming: State Game and Fish Comm., Cheyenne.
 Canada: Canadian Travel Bureau, Ottawa.

Biggest Dog Show Revived

Crufts, the world's biggest dog show with 4,200 entries, was revived in 1948 after a lapse since 1939 in London's Olympia Stadium. Best in show went to a 3-year-old cocker spaniel, Tracey Witch, owned by Herbert S. Lloyd of Uxbridge, who showed at Crufts the first time fifty-one years before. His family has bred cocker spaniels for nearly 100 years.

80th Anniversary Marked by N.Y.A.C.

In 1948 the New York A. C. celebrated its eightieth anniversary. The club was founded by John C. Babcock, Henry E. Buermeyer and William B. (Father Bill) Curtis, three prominent oarsmen of their day. Babcock was a member of the Nassau Boat Club while Buermeyer and Curtis had seats in the Atlantic Boat Club shell. The Winged Foot club has more than 7,300 members.

FISHING

WORLD ALL-TACKLE RECORDS

Caught with Rod and Reel in Salt Water

Source: International Game Fish Association, Francesca LaMonte, Secretary.

Species	Lb., oz.	Length	Girth	Where caught	Year	Angler
Bacora	66-4	....	....	Catalina, California	1912	Frank Kelly
amberjack	106	68½"	37"	Pass-a-Grille, Florida	1937	Harvey M. Harker
arracuda	103-4	66"	31¼"	Bahama Islands	1932	Chester E. Benet
ass, Calif. Black Sea	515	....	....	Catalina, California	1916	Wallace Beery
ass, Calif. White Sea	74-4	76"	30"	Playa del Rey, California	1941	W. M. Hartness
ass, Channel	75-8	64¾"	41"	Cape Hatteras, N. C.	1941	Capt. B. R. Ballance
ass, Sea	8-2	....	....	Banks off New York	....	Peter Volkman
ass, Striped	73	60"	30½"	Vineyard Sound, Mass.	1913	Chas. B. Church
ackfish (Tautog)	21-2	30"	21¼"	Sheepshead Bay, N. Y.	1937	Albert von Kleist
onefish	13-12	31"	17"	Bimini, Bahamas	1919	B. F. Peek
ero (Fla. Kingfish)	73-8	62"	32"	Bimini, Bahamas	1935	Leonard B. Harrison
obia	102	70"	34"	Cape Charles, Va.	1938	J. E. Stansbury
olphin	67-8	68½"	37½"	Oahu, Hawaii	1940	Fred McNamara
rum, Black	90	....	....	Surf City, New Jersey	1925	Capt. Jack Inman
under, Summer	19	....	....	Banks off New York	c.1895	Fred Foster
owfish	551	100"	....	Galveston Bay, Texas	1937	G. Pangarakis
arlin, Blue	737	157"	72"	Bimini, Bahamas	1941	J. V. Martin
arlin, Pacific Black	976	152"	74"	Bay of Islands, N. Z.	1926	Capt. Laurie Mitchell
arlin, Silver	618	138"	62"	Tahiti	1930	Zane Grey
arlin, Striped	692	161"	....	Balboa, California	1931	A. Hamann
arlin, White	161	104"	33"	Miami, Florida	1938	L. F. Hooper
ermit	39-8	41"	32"	Bimini, Bahamas	1947	E. T. Ragsdale
		39¼"	29½"	Long Key, Fla.	1946	H. P. Clark
ailfish, Atlantic	106	....	....	Miami Beach, Florida	1929	Wm. Bonnell
ailfish, Pacific	221	129"	....	Santa Cruz, Is., Galapagos	1947	C. W. Stewart
awfish	736	175"	....	Galveston, Texas	1938	Gus Pangarakis
hark, Mako	1000	144"	....	Mayor Island, N. Z.	1943	B. D. H. Ross
hark, Porbeagle	1009	126"	72"	Egmont Key, Florida	1936	Al. Hack
hark, Thresher	922	....	....	Bay of Islands, N. Z.	1937	W. W. Dowding
hark, Tiger	1382	166"	93"	Sydney Heads, Australia	1939	Lyle Bagnard
hark, White	1919	176"	96½"	Kangaroo Island, Australia	1941	G. R. Cowell
hook (Robalo)	50-8	55"	....	Chagres River, Canal Zone	1944	Capt. J. W. Anderson
wordfish, Broadbill	860	165"	70"	Tocopilla, Chile	1940	W. E. S. Toker
arpon	247	89½"	....	Panuco River, Mexico	1938	H. W. Sedgwick
una, Allison	265	73"	53"	Makua, Hawaii	1937	J. W. Harvey
una, Bluefin	927	123"	80"	Ipswich Bay, Mass.	1940	J. Vernaglia
una, Dogtoothed	151-13.6	....	....	Tahiti	1936	Dr. S. Rabinovitch
ahoo	133-8	83"	31"	Green Cay, Bahamas	1943	K. L. Ames, Jr.
reakfish	17-8	46"	19"	Mullica River, N. J.	1944	A. Weisbecker, Jr.
reakfish, Spotted	14	33½"	18"	Lake Worth, Florida	1946	R. N. Rose
ellowtail	88	64"	31"	Bermagui, Australia	1938	Clive Firth

Caught with Rod and Reel in Fresh Water

Source: Field & Stream, 515 Madison Avenue, New York 22, N. Y.

Species	Lb., oz.	Length	Girth	Where caught	Year	Angler
ack Bass, Largemouth	22-4	32½"	28½"	Montgomery Lake, Ga.	1932	George W. Perry
ack Bass, Smallmouth	14	28"	21¼"	Oakland, Florida	1932	Walter Harden
arp	42	42"	29"	Rappahannock River, Va.	1930	Robert W. Harris
atfish, Channel	32	42"	28½"	Oconee River, Ga.	1948	A. E. Herman
uskalonge	64-8	58"	24"	Lac du Flambeau, Wisconsin	1947	Alois Hanser
erch, Yellow	4-3½	....	....	Bordentown, New Jersey	1865	Dr. C. C. Abbot
ickarel, Eastern chain	9	30"	15"	Green Pond, N. J.	1948	Russell Kimble
ike, Northern	46-2	52½"	25"	Sacandaga Reservoir, N. Y.	1940	Peter Dubuc
ike, Walleyed	22-4	36¼"	21"	Fort Erie, Ontario	1943	Patrick E. Noon
almon, Atlantic	79-2	....	....	Tanaelv, Norway	1928	Henrik Henriksen
almon, Chinook	83	....	....	Umpqua River, Oregon	1910	F. R. Steel
almon, Landlocked	22-8	36"	....	Sebago Lake, Maine	1907	Edward Blakely
out, Brook	14-8	....	....	Nipigon River, Ontario	1916	Dr. W. J. Cook
out, Brown	39-8	....	....	Loch Awe, Scotland	1866	W. Muir
out, Cutthroat	41	39"	....	Pyramid Lake, Nevada	1925	John Skimmerhorn
out, Dolly Varden	29-4	36¼"	24¾"	Pend Oreille Lake, Idaho	1947	R. C. Worst
out, Lake	63	47½"	....	Lake Athapapuskow, Manitoba	1930	Miss L. L. Hayes
out, Rainbow or Steelhead	37	40½"	28"	Pend Oreille Lake, Idaho	1947	Wes Hamlet
out, Sunapee	8	28¼"	19"	Lake Sunapee, N. H.	1948	Thorsten B. Lind

FLY AND BAIT CASTING

Source: Charles S. Lacey, Executive Secretary, National Association of Angling and Casting Clubs.

WORLD RECORDS

Official Distance Events				Feet
Trout Fly (average)—Dick Miller, San Diego, Calif.	176	$\frac{3}{8}$ -oz. Bait (average)—Clarence Anthes, Waukesha, Wis.	359	$\frac{3}{4}$
Trout Fly (long cast)—Dick Miller	183	$\frac{3}{8}$ -oz. Bait (long cast)—Clarence Anthes	385	
Salmon Fly (average)—Jimmy Green, San Francisco	198	Official Accuracy Events		
Salmon Fly (long cast)—Jimmy Green	206	Dry Fly—Frank Steel, Chicago	100	Score
$\frac{5}{8}$ -oz. Bait (average)—Earl Osten, San Diego, Calif.	409	Wet Fly—Held by 22 casters	100	
$\frac{5}{8}$ -oz. Bait (long cast)—Earl Osten	420	$\frac{5}{8}$ -oz. Bait—J. A. Halbleib, Louisville	100	
		$\frac{3}{8}$ -oz. Bait—S. G. Dennis, Chicago	99	
		Adelea McDonald, Chicago		
		Charles Sutphin, Indianapolis		

NATIONAL CHAMPIONS, 1948

Asterisk (*) indicates new record.

Men		Distance Events		Feet
ALL-AROUND—Charles Schall, St. Louis		TROUT FLY—Dick Miller	167	$\frac{3}{4}$
ALL-DISTANCE—Earl Osten, San Diego, Calif.	3145 ft.	SALMON FLY—Dick Miller	196	$\frac{3}{4}$
DISTANCE BAITS—Earl Osten	2160 ft.	$\frac{3}{8}$ -OZ. BAIT—Bill Lovely, St. Louis	328	$\frac{1}{2}$
DISTANCE FLIES—Dick Miller, San Diego, Calif.	1091 ft.	$\frac{5}{8}$ -OZ. BAIT—Earl Osten	1409	$\frac{3}{4}$
ALL-ACCURACY—Ed Tassi, San Francisco	387 pts.	†World record.		
Charles Sutphin, Indianapolis		Skish Events		
ACCURACY BAITS—Charles Sutphin	197 pts.			Score
ACCURACY FLIES—Ed Tassi	198 pts.	MEN'S BAIT—Marion Garber, Toledo, Ohio	90	
		MEN'S FLY—H. Perkins, Memphis, Tenn.	90	
		WOMEN'S BAIT—Dorothy Vogel	76	
		WOMEN'S FLY—Dorothy Vogel	90	
		JUNIOR BAIT—Billy Lamb, Fort Worth, Texas	74	
		ALL-AROUND—Marion Garber		
Women		Combined Events Champions		Score
ALL-ACCURACY—Dorothy Vogel, Paterson, N. J.	380 pts.	ALL-ACCURACY—Earl Osten—Charles Sutphin	389	
ACCURACY BAITS—Adelea McDonald, Chicago	191 pts.	ACCURACY FLIES—Lou Guerin, San Francisco—Ed Tassi	198	
ACCURACY FLIES—Dorothy Vogel	193 pts.	ACCURACY BAITS—Charles Sutphin	197	
Juniors				Feet
ALL-ACCURACY—Sandy Greenblat, San Francisco	358 pts.	ALL-DISTANCE—Earl Osten	3145	
ACCURACY BAITS—Danny Hayes, Dallas	192 pts.	DISTANCE BAITS—Lee Sens, New Orleans	2174	
ACCURACY FLIES—Sandy Greenblat	181 pts.	DISTANCE FLIES—Dick Miller	1091	
Accuracy Events		SKISH		Score
MEN				
Score		BAITS—Marion Garber	90	
DRY FLY—Ed Tassi	98	FLY—Dorothy Vogel	97	
WET FLY—Archie Vogel, Paterson, N. J.	100	Five-Man Team Event		
$\frac{3}{8}$ -OZ. BAIT—Charles Sutphin	99			Score
$\frac{5}{8}$ -OZ. BAIT—Charles Sutphin	97	$\frac{5}{8}$ -OZ. BAIT—St. Louis Fly & Bait Casting Club	481	
WOMEN		Club Pennant		
DRY FLY—Dorothy Vogel	97			26 pts.
WET FLY—Joan Salvato, Paterson, N. J.	98			
$\frac{3}{8}$ -OZ. BAIT—Adelea McDonald	95			
$\frac{5}{8}$ -OZ. BAIT—Dorothy Vogel	97			
JUNIORS				
DRY FLY—Jon Tarantino, San Francisco	95			
WET FLY—Fred Sexauer, Jr., St. Louis	95			
$\frac{3}{8}$ -OZ. BAIT—Danny Hayes, Dallas	94			
$\frac{5}{8}$ -OZ. BAIT—Danny Hayes	98			

First U. S. Amateur Meet in 1876

The first American amateur track and field championships were conducted by the New York Athletic Club in 1876. In 1877, the Winged Foot club held the initial amateur swimming championships and the following year sponsored the first amateur boxing and wrestling championships.

HANDBALL CHAMPIONS, 1948

National A.A.U. 4-Wall Softball

SINGLES—Constantine Lewis, Hollywood, Calif.
DOUBLES—Frank Gluckler-David Pahl, New York

National A.A.U. 1-Wall Softball

SINGLES—Vic Herschkowitz, Brooklyn
DOUBLES—Vic Herschkowitz-A. Wolfe, Brooklyn

FENCING

Source: Amateur Fencers League of America.

NATIONAL CHAMPIONS

	Foil	Epee	Saber	Women's foil
92.	W. S. O'Connor	B. F. O'Connor	R. O. Haubold	
93.	W. T. Heintz	G. M. Hammond	G. M. Hammond	
94.	C. G. Bothner	R. O. Haubold	G. M. Hammond	
95.	A. V. Z. Post	C. G. Bothner	C. G. Bothner	
96.	G. Kavanaugh	A. V. Z. Post	C. G. Bothner	
97.	C. G. Bothner	C. G. Bothner	C. G. Bothner	
98.	No competition			
99.	G. Kavanaugh	M. Diaz	G. Kavanaugh	
100.	F. Townsend	W. D. Lyon	J. L. Erving	
101.	C. Tatham	C. Tatham	A. V. Z. Post	
102.	J. P. Parker	C. Tatham	A. V. Z. Post	
103.	F. Townsend	C. Tatham	A. V. Z. Post	
104.	C. G. Bothner	C. G. Bothner	A. G. Anderson	
105.	C. G. Bothner	W. S. O'Connor	K. B. Johnson	
106.	S. D. Breckinridge	W. Grebe	A. G. Anderson	
107.	C. Waldbott	W. D. Lyon	A. G. Anderson	
108.	W. L. Bowman	P. Benzenberg	G. W. Postgate	
109.	O. A. Dickinson	A. De La Poer	A. E. Sauer	
110.	G. K. Bainbridge	A. De La Poer	J. T. Shaw	
111.	G. H. Breed	G. H. Breed	A. G. Anderson	A. Baylis
112.	S. Hall	A. V. Z. Post	C. A. Bill	Mrs. W. H. Dewar
113.	P. J. Meylan	A. E. Sauer	A. G. Anderson	M. Stimson
114.	S. D. Breckinridge	F. W. Allen	W. Von Blijenburgh	J. Pyle
115.	O. A. Dickinson	J. A. MacLaughlin	S. Hall	Mrs. C. H. Voorhees
116.	A. E. Sauer	W. H. Russell	S. Hall	F. Walton
117.	S. Hall	L. G. Nunes	A. S. Lyon	
118.	No competition			No competition
119.	S. Hall	W. H. Russell	A. S. Lyon	A. Gehrig
120.	S. Hall	R. W. Dutcher	S. Hall	A. Gehrig
121.	F. W. Honeycutt	C. R. McPherson	C. R. McPherson	A. Gehrig
122.	H. M. Raynor	L. G. Nunes	L. G. Nunes	A. Gehrig
123.	R. Peroy	G. C. Calnan	L. M. Schoonmaker	A. Gehrig
124.	L. G. Nunes	L. G. Nunes	J. E. Gignoux	Mrs. C. H. Hopper
125.	G. C. Calnan	W. H. Russell	J. Vince	Mrs. L. M. Schoonmaker
126.	G. C. Calnan	L. G. Nunes	L. G. Nunes	Mrs. L. M. Schoonmaker
127.	G. C. Calnan	H. Van Buskirk	N. Muray	S. Stern
128.	G. C. Calnan	L. G. Nunes	N. Muray	M. Lloyd
129.	J. L. Levis	F. S. Righeimer	L. G. Nunes	Mrs. L. M. Schoonmaker
130.	G. C. Calnan	M. Pasche	N. C. Armitage	Mrs. H. Van Buskirk
131.	G. C. Calnan	M. A. de Capriles	J. R. Huffman	M. Lloyd
132.	J. L. Levis	L. G. Nunes	J. R. Huffman	D. Locke
133.	J. L. Levis	G. M. Heiss	J. R. Huffman	D. Locke
134.	H. V. Alessandrini	G. M. Heiss	N. C. Armitage	H. Mayer
135.	J. L. Levis	T. J. Sands	N. C. Armitage	H. Mayer
136.	H. V. Alessandrini	G. M. Heiss	N. C. Armitage	Mrs. J. de Tuscan
137.	J. L. Levis	T. J. Sands	J. R. Huffman	H. Mayer
138.	D. Every	J. R. de Capriles	J. R. Huffman	H. Mayer
139.	N. Lewis	L. Tingley	N. C. Armitage	H. Mayer
140.	D. Every	F. Seibert	N. C. Armitage	H. Mroczkowska
141.	D. Cetrulo	G. M. Heiss	N. C. Armitage	H. Mayer
142.	W. Dow	H. Santos	N. C. Armitage	H. Mayer
143.	W. Dow	R. Driscoll	N. C. Armitage	H. Mroczkowska
144.	A. Snyder	M. A. de Capriles	T. Nyilas	M. Dalton
145.	D. Every	M. Gilman	N. C. Armitage	M. Cerra
146.	J. R. de Capriles	A. Wolff	T. Nyilas	H. Mayer
147.	Dean Cetrulo	James Strauch	James Flynn	Mrs. Helena Dow
148.	Nathaniel Lubell	Norman Lewis	Dean Cetrulo	Mrs. Helena Dow

NATIONAL TEAM CHAMPIONS, 1948

FOIL—New York A. C. (Warren Dow, Dernel Every, Wallace Goldsmith)
 EPEE—Salle Santelli, New York (Jose R. de Capriles, Ralph Goldstein, Norman Lewis, Marvin Metzger)

SABER—Salle Santelli (Dean Cetrulo, Jack Gorlin, Dr. Tibor Nyilas, George Worth)
 THREE-WEAPON—Salle Santelli (Dean Cetrulo, Jose R. de Capriles, Dr. Tibor Nyilas)
 WOMEN—Faulkner School, Hollywood (Polly Craus, Deirda Gale, Janice York)

RIFLE AND PISTOL SHOOTING

Source: Raymond J. Stann, National Rifle Association of America.

The X count is used in most small-bore records to break ties. The X-ring on the target is a circle within the 10-ring and in a case where two or more competitors have the same point score, the one with the most X's is declared the winner. (m) Indicates metallic sight used. (a) Indicates any sight used. V-ring (bull's-eye value 5 points) used instead of x-ring on Army target in Palma Course only.

National Outdoor Small-Bore Rifle Records

20 SHOTS, 50 YARDS AND 20 SHOTS, 100 YARDS (Dewar Course)

Event and record holder	Score	Year
Individual—William Woodring	400-37x(m)	1939
Individual—William Woodring	400-37x(a)	1939
2-man team—D. Bashline-M. Israel-son	800(m)	1937
2-man team—R. Kuhn-F. Kuhn	800-67x(a)	1948
4-man team—National Capital R. & P. Club	1591-94x(m)	1948
4-man team—National Capital R. & P. Club	1597-117x(a)	1948
5-man team—Glendale (Calif.) S. C.	1984(m)	1937
5-man team—Salt Lake Small Arms Club	1991-117x(a)	1947

20 SHOTS, 50 YARDS

Individual—Charles C. Whipple	200-20x(m)	1947
Individual—Ransford G. Wise	200-20x+15x(a)	1948
2-man team—W. Tomsen-A. C. Jackson	400-26x(m)	1946
2-man team—H. Greer-J. Wade	400-32x(a)	1941

40 SHOTS, 50 YARDS

Individual—Edward H. Cushing	400-39x(m)	1948
Individual—Otto Kolb	400-40x+5x(a)	1948

20 SHOTS, 100 YARDS

Individual—Walter Tomsen	200-18x(m)	1945
Individual—Craig Rider	200-19x(a)	1947
2-man team—W. Patrinquin-C. Rider	400-21x(m)	1940
2-man team—J. Lacy-W. Breuler	400-36x(a)	1939
4-man team—Gunners Club, L. I.	788-34x(m)	1947
4-man team—Crown City R. C.	799-59x(a)	1948
5-man team—McKean R. C.	992-55x(a)	1940

40 SHOTS, 100 YARDS

Individual—Dave Carlson	400-36x(m)	1941
Individual—Arthur Cook	400-37x(a)	1948
2-man team—W. Tomsen-A. C. Jackson	790-41x(m)	1947
2-man team—E. Kiss-E. Felix	799-57x(a)	1948
4-man team—Los Angeles R. & R. C.	1584(m)	1936
4-man team—Gunners Club, L. I.	1591-97x(a)	1948

20 SHOTS, 50 METERS

Event and record holder	Score	Year
Individual—Arthur Boeckmann	200-18x(m)	1944
Individual—Robert E. Perkins	200-19x(a)	1947
2-man team—F. Kuhn-R. Kuhn	400-26x(m)	1948
2-man team—C. Whipple-R. L. Pollum	400-31x(a)	1947
4-man team—East Alton R. & P. C.	792(m)	1937
4-man team—Orco Gun Club	793-43x(a)	1941
5-man team—American Legion Post 209	970(a)	1938

40 SHOTS, 50 METERS

Individual—Charles C. Whipple	400-34x(m)	1947
Individual—Jack Folk	400-39x(a)	1948
2-man team—A. Cook-J. Ruppert	800-54x(a)	1948
4-man team—Gunners Club, L. I.	1573-80x(a)	1946

20 SHOTS, 200 YARDS

Individual—Charles Whipple	199-12x(m)	1939
Individual—A. F. Goldsborough	200-14x(a)	1936
2-man team—D. Carlson-J. Lacy	395-15x(a)	1941
4-man team—Limited Steel Car Corp.	785(a)	1933

15 SHOTS AT EACH RANGE OF 150, 175, AND 200 YARDS (PALMA COURSE)

Individual—T. G. Arnold	225-42x(a)	1934
4-man team—Guinnipiac R. & P. Club	899-151v(a)	1938

SWISS MATCH COURSE

Fired prone at 200 yards until a shot is placed outside bull's-eye.

(C-5 target—bull's-eye diameter, 7.2 inches)

Bull's eyes		
Individual—Stiles Stevens	98 in row(m)	1936
Individual—Arthur Jackson	324(a)	1940

(Decimal target—bull's-eye diameter, 4 inches)

Individual—Charles Hamby	99(a)	1937
Individual—William Schweitzer	220(m)	1939

LACROSSE

NATIONAL OPEN CHAMPION—Mt. Washington Club, Baltimore
INTERCOLLEGIATE CHAMPION—Johns Hopkins

1948 NORTH-SOUTH LINEUPS

North

Asterisk (*) indicates starter

ATTACK—*Leonard Gaines (Princeton), *Larry O'Connor (R.P.I.), *Richard Meryman (Williams), John Egbert (Army), Emery Larson (Yale).
MIDFIELD—*Mark Galloway (Colgate), *John Nolan (Penn State), *Henry Fish (Princeton), Arthur Beard (R.P.I.), Raymond Barton (Army), Robert Markes (Union), William Travis (Army), Alan Myers (R.P.I.), Benjamin Collins (Lehigh).
DEFENSE—*John McNery (Army), *Spencer Spaulding (R.P.I.), *Fred Allner (Princeton), Arthur Hill (Harvard), Charles DiLiberti (Rutgers).
GOAL—*Samuel Ogden (Princeton), Richard Bernard (Harvard).

South

ATTACK—*Thomas Tongue (Washington & Lee), *Charles Couiter (Navy), *Brooke Tunstall (Johns Hopkins), Clarence Andrew (Drexel).
MIDFIELD—*Fred Smith (Johns Hopkins), *Ray Greene (Johns Hopkins), *Robert Schultz (Navy), Charles Herbert (Maryland), Bill Ruppertsberger (Maryland), Alex

Hill (Washington & Lee), Pete Weaver (Kenyon), Ed Hughes (Loyola), Walter Cosinuke (Swarthmore), James Bowditch (Swarthmore).
DEFENSE—*Bill Nuttle (Maryland), *Robert Proutt (Virginia), *Lloyd Bunting (Johns Hopkins), Garrett Billmore (Duke), John Mohler (Loyola).
GOAL—*Tom Hoeffcker (Maryland), Bill Clements (Washington & Lee).

Score by Quarters

North	.....	2	2	5	2—11
South	.....	3	1	1	1—6

Scoring: North—Gaines (2), Egbert, Meryman (2), Beard, Barton, Nolan, Travis, Fish (2); South—Tongue (2), Couiter, Greene (3).

Officials: Moorehead, Ellinger.

North-South Game Record

1940—North	6,	South	5	1944—No	games
1941—South	7,	North	6	1946—North	14,
1942—North	6,	South	3	1947—North	15,
1943—South	9,	North	5	1948—North	11,
				South	6

National Outdoor Pistol Records

In the pistol records there are three categories: .22 caliber fire, center fire, and .45 caliber. Center-fire pistols or revolvers must be .32 caliber or larger. (s) Slow fire; (t) timed fire; (r) rapid fire. o—Continued ring until a shot scored outside the 10-ring.

.22 Caliber Pistol or Revolver

Event and record holder	Score	Year
shots, 50 yd. (s)*—Harry Reeves	198	1940
shots, 25 yd. (t)*—		
H. L. Benner	200 (plus 50e)	1943
shots, 25 yd. (r)*—		
H. L. Benner	200 (plus 25e)	1947
*1 minute per shot.	†20 seconds per 5 shots.	
†10 seconds per 5 shots.		

NATIONAL MATCH COURSE

0 shots slow fire at 50 yd.; 10 shots timed fire at 25 yd.; 10 shots rapid fire at 25 yd.)		
individual—Harry Reeves	297	1946
man team—F. O'Conner-G. Huddleston	585	1940
man team—U. S. Treasury	1172	1941
man team—250th C. A., Calif. National Guard	1440	1941

NRA SHORT COURSE

(10 shots slow, timed and rapid fire at 25 yd.)		
individual—C. A. Brown	296	1943
man team—C. A. Brown-P. C. Roettinger	586	1944

CAMP PERRY COURSE

0 shots slow, timed and rapid fire at 25 yd., using 25-yd. rapid-fire target)		
individual—H. L. Benner	300 (plus 10e)	1948
man team—F. O'Conner-G. Huddleston	598	1940
man team—Detroit Pistol Club	1178	1948
man team—St. Louis Police	1444	1937

Center-fire Pistol or Revolver

shots, 50 yd. (s)—Harry Reeves	198	1948
shots, 25 yd. (t)—		
H. L. Benner	200 (plus 15e)	1947
shots, 25 yd. (r)—Emmett Jones	200	1946

NATIONAL MATCH COURSE

Event and record holder	Score	Year
Individual—Alfred Hemming	298	1938
2-man team—Lee Echols-A. Anderson	586	1941
4-man team—U. S. Treasury	1156	1941
5-man team—U. S. Treasury	1419	1938

NRA SHORT COURSE

Individual—Basil Starkey	296	1943
4-man team—Quintico Marine Team	1144	1943

CAMP PERRY COURSE

Individual—Jack Ahearn	298	1947
Kenneth Kolb	298	1948
2-man team—A. Hemming-H. Reeves	597	1938
4-man team—U. S. Treasury	1183	1941
5-man team—Los Angeles Police	1464	1938

.45 Caliber Pistol or Revolver

20 shots, 50 yd. (s)—Harry Reeves	194	1941
20 shots, 25 yd. (t) { J. R. Tucker	199	1940
{ Emmett Jones	199	1948
20 shots, 25 yd. (r) { F. M. O'Connor	198	1942
{ Paul Knepp	198	1948

NATIONAL MATCH COURSE

Individual—Harry Reeves	292	1941
2-man team—A. W. Hemming-H. Reeves	568	1941
4-man team—Detroit Police	1140	1941
5-man team—U. S. Treasury	1403	1941

NRA SHORT COURSE

Individual—H. L. Benner	296	1948
2-man team—W. E. Fletcher-J. R. Tucker	548	1944

CAMP PERRY COURSE

Individual—Harry Reeves	297	1948
2-man team—A. L. Meloche-Lee Echols	570	1941
4-man team—Quintico Marine Team	1146	1944
5-man team—Detroit Police	1455	1941

ROLLER SKATING

A. R. S. A. CHAMPIONS, 1948

Source: United States Amateur Roller Skating Association.

Recognized by the Amateur Skating Union, Federation International de Patinage a Roulettes and Amateur Athletic Union.)

National Figure

MEN'S SENIOR—Reggie Opie, Mineola, N. Y.
WOMEN'S SENIOR—Charlotte Ludwig, Elizabeth, N. J.
MEN'S JUNIOR—Kurt Hornlein, Elizabeth, N. J.
WOMEN'S JUNIOR—Diana Lanzotti, Elizabeth, N. J.
MEN'S NOVICE—Ronald Rancourt, Hartford, Conn.
WOMEN'S NOVICE—Carol Ann Freitag, Bergenfield, N. J.
MIXED PAIRS—Charlotte Ludwig-Jude Cull, Elizabeth, N. J.
WOMEN'S PAIRS—Violet Gargano-Mary Louise Leahey, Elizabeth, N. J.
BOYS' JUNIOR—Kurt Hornlein, Rod Hackett, Violet Gargano, Mary Louise Leahey, Elizabeth, N. J.
DANCE—Gladys Ward-Fred Ludwig, Mineola, N. Y.

National Speed

MEN'S SENIOR—Larry Bissinger, Mount Vernon, N. Y.
WOMEN'S SENIOR—Tessie Raiffe, Elizabeth, N. J.
MEN'S INTERMEDIATE—Leonard Murro, Florham Park, N. J.
WOMEN'S INTERMEDIATE—Virginia Mann, Mount Vernon, N. Y.
BOYS' JUNIOR—Burton Speed, Hackensack, N. J.
GIRLS' JUNIOR—Alice Williams, Washington, D. C.

RINK OPERATORS CHAMPIONS, 1948

Source: Roller Skating Rink Operators Association of the United States.

National Figure

MEN'S SENIOR—J. W. Norcross, Jr., Greeley, Colo.
WOMEN'S SENIOR—Nancy Lee Parker, Mt. Clemens, Mich.
MEN'S INTERMEDIATE—Rudy Goldman, Brooklyn
WOMEN'S INTERMEDIATE—Dorothy Glintenkamp, Brooklyn
MEN'S NOVICE—Cecil Davis, Greeley, Colo.
WOMEN'S NOVICE—Phyllis Bulleigh, Greeley, Colo.
BOYS' JUNIOR—Rodger Fuerst, Greeley, Colo.
GIRLS' JUNIOR—Kunnie Mae Williams, Greeley, Colo.
MIXED PAIRS—Cecil Davis-Phyllis Bulleigh
FOURS—Thomas Lane, Patricia Carroll, Donald Tuohy, Jeanne Kuester, Elmhurst, N. Y.
DANCE—Clifford Schattenkirk-Bettie Jennings, Seattle

National Speed

MEN'S SENIOR—Orville Godfrey, Jr., Detroit
WOMEN'S SENIOR—Mary Lou Dauer, Cincinnati
MEN'S INTERMEDIATE—Dale Godfrey, Detroit
WOMEN'S INTERMEDIATE—Janet Danner, Cincinnati
BOYS' JUNIOR—Paul Best, Springfield, Mo
GIRLS' JUNIOR—Alice Plumb, Detroit

DOG SHOWS

Source: The American Kennel Club.

Morris and Essex Kennel Club Exhibition

(Madison, New Jersey)

Year	Best in show	Breed	Owner
1927	Ch. Higgins' Red Pat.	Irish setter	William W. Higgins
1928	Ch. Delf Discriminate of Pinegrade	Sealyham terrier	Pinegrade Kennels
1929	Ch. Little Emir	Pomeranian	Mrs. V. Matta
1930	Ch. Weltona Frizzette of Wildoaks	Fox terrier, wire	Mr. and Mrs. R. C. Bondy
1931	Ch. Fionne v Loheland of Walnut Hall	Great dane	Harkness Edwards
1932	Ch. Lone Eagle of Earlsmoor	Fox terrier, wire	Dr. and Mrs. S. Milbank
1933	Eppingville of Blarney	Fox terrier, wire	John G. Bates
1934	Ch. Gunside Babs of Hollybourne	Sealyham terrier	S. L. Froelich
1935	Ch. Milson O'Boy	Irish setter	Mrs. Cheever Porter
1936	Ch. Mr. Reynal's Monarch	Harrier	Amory L. Haskell
1937	Ch. Sturdy Max	English setter	Maridor Kennels
1938	Ch. Ideal Weather	Old English sheep dog	Leonard Collins
1939	Ch. My Own Brucie	Cocker spaniel	H. E. Mellenthin
1940	Ch. Blakeen Jung Frau	Poodle, standard	Blakeen Kennels
1941	Ch. Nornay Saddler	Fox terrier, smooth	Wissaboo Kennels
1942-45	No shows		
1946	Ch. Benbow's Beau	Cocker spaniel	Robert A. Gusman
1947	Rock Ridge Night Rocket	Bedlington terrier	Mr. and Mrs. W. A. Rockefeller
1948	Ch. Rock Ridge Night Rocket	Bedlington terrier	Mr. and Mrs. W. A. Rockefeller

Westminster Kennel Club Exhibition

(Madison Square Garden, New York, N. Y.)

Year	Best in show	Breed	Owner
1907	Ch. Warren Remedy	Fox terrier, smooth	Winthrop Rutherford
1908	Ch. Warren Remedy	Fox terrier, smooth	Winthrop Rutherford
1909	Ch. Warren Remedy	Fox terrier, smooth	Winthrop Rutherford
1910	Ch. Sabine Rarebit	Fox terrier, smooth	Sabine Kennels
1911	Ch. Tickle Em Jock	Scottish terrier	A. Albright, Jr.
1912	Ch. Kenmore Sorceress	Airedale terrier	William P. Wolcott
1913	Ch. Strathway Prince Albert	Bulldog	Alex H. Stewart
1914	Ch. Brentwood Hero	Old English sheep dog	Mrs. Tyler Morse
1915	Ch. Matford Vic	Fox terrier, wire	George W. Quintard
1916	Ch. Matford Vic	Fox terrier, wire	George W. Quintard
1917	Ch. Conejo Wycollar Boy	Fox terrier, wire	Mrs. Roy A. Rainey
1918	Ch. Haymarket Faultless	Bull terrier	R. H. Elliot
1919	Ch. Briergate Bright Beauty	Airedale terrier	G. L. L. Davis
1920	Ch. Conejo Wycollar Boy	Fox terrier, wire	Mrs. Roy A. Rainey
1921	Ch. Midkiff Seductive	Cocker spaniel	William T. Payne
1922	Ch. Boxwood Barkentine	Airedale terrier	Frederic C. Hood
1923	No best in show award		
1924	Ch. Barberryhill Bootlegger	Sealyham terrier	Bayard Warren
1925	Ch. Governor Moscow	Pointer	Robert F. Maloney
1926	Ch. Signal Circuit	Fox terrier, wire	Halleston Kennels
1927	Ch. Pinegrade Perfection	Sealyham terrier	Frederic C. Brown
1928	Ch. Talavera Margaret	Fox terrier, wire	R. M. Lewis
1929	Land Loyalty of Bellhaven	Collie	Mrs. Florence B. Ilch
1930	Ch. Pendley Calling of Blarney	Fox terrier, wire	John G. Bates
1931	Ch. Pendley Calling of Blarney	Fox terrier, wire	John G. Bates
1932	Ch. Nancolieth Markable	Pointer	Giralda Farms
1933	Ch. Warland Protector of Shelterock	Airedale terrier	S. M. Stewart
1934	Ch. Flornell Spicy Bit of Halleston	Fox terrier, wire	Halleston Kennels
1935	Ch. Nunsoe Duc de la Terrace of Blakeen	Poodle	Blakeen Kennels
1936	Ch. St. Margaret Magnificent of Clairedale	Sealyham terrier	Clairedale Kennels
1937	Ch. Flornell Spicy Piece of Halleston	Fox terrier, wire	Halleston Kennels
1938	Daro of Maridor	English setter	Maridor Kennels
1939	Ferry v. Rauffelsen of Giralda	Doberman pinscher	Giralda Farms
1940	Ch. My Own Brucie	Cocker spaniel	H. E. Mellenthin
1941	Ch. My Own Brucie	Cocker spaniel	H. E. Mellenthin
1942	Ch. Wolvey Pattern Edgerstoune	West Highland terrier	Mrs. John G. Winant
1943	Ch. Pitter Patter of Piperscroft	Miniature poodle	Mrs. P. H. B. Frelinghuysen
1944	Ch. Flornell Rare-Bit of Twin Ponds	Welsh terrier	Mrs. Edward P. Alker
1945	Shieling's Signature	Scottish terrier	Mr. and Mrs. T. H. Snethen
1946	Ch. Hetherington Model Rhythm	Fox terrier, wire	Mr. and Mrs. T. H. Carruthers III
1947	Ch. Warlord of Mazelaine	Boxer	Mr. and Mrs. R. C. Kettles, Jr.
1948	Ch. Rock Ridge Night Rocket	Bedlington terrier	Mr. and Mrs. W. A. Rockefeller

TRAPSHOOTING

Grand American Winners, 1948

(At Vandalla, Ohio, Aug. 23 to 28)

Source: *Sports Afield*, 401-05 Second Ave. So., Minneapolis 1, Minn.

	Score
GRAND AMERICAN HANDICAP—John Schenk, Sharpsburg, Pa. (20 yd.)	99x100
WOMEN'S GRAND AMERICAN HANDICAP—Mrs. Julius Petty, Stuttgart, Ark. (17 yd.)	98x100
PROFESSIONAL HANDICAP—Charlie Mason, Corsicana, Texas (24 yd.)	96x100
RELIMINARY HANDICAP—Ray S. Painter, Lomax, Ill. (19 yd.)	99x100
RELIMINARY PROFESSIONAL—Harry Schomerus, Chicago, (22 yd.)	97x100
WOMEN'S PRELIMINARY—Mrs. G. A. Roose, Salem, Ohio (19 yd.)	96x100
DOUBLES—Mercer Tennille, Shreveport, La.	99x100
PROFESSIONAL DOUBLES—Homer Clark, Jr., Alton, Ill.	98x100
STATE TEAM RACE—Ohio	985x1000
ORTH AMERICAN CLAY TARGET CHAMPIONSHIP—Johnny Broughton, Ferguson, Mo.	200x200
WOMEN'S CHAMPIONSHIP—Lela Hall Frank, Sierra Madre, Calif.	197x200
PROFESSIONAL CHAMPIONSHIP—Cliff Doughman, Morrow, Ohio.	199x200
GRAND AMERICAN INTRODUCTORY—Vic Reinners, Waukesha, Wis.	200x200
GRAND AMERICAN OPEN CHAMPIONSHIP—Julius Petty, Stuttgart, Ark.	200x200
CHAMPION OF CHAMPIONS—E. W. Castenado, Shreveport, La.	100x100
WOMEN'S CHAMPION OF CHAMPIONS—Moselle Cameron, Denver.	100x100
VETERANS' CHAMPIONSHIP—Forest McNeir, Houston, Texas.	99x100
FATHER AND BROTHER—Herb and M. E. Hypes, Dayton, Ohio.	195x200
JUNIOR CHAMPIONSHIP—Robert Reese, Geneseo, Ill.	99x100
YOUTH JUNIOR CHAMPIONSHIP—Dwayne Brownlee, Wichita, Kans.	96x100
FATHER AND SON—Pat Harbaugh, Medicine Lodge, Kans.—J. A. Harbaugh, Keyes, Okla.	197x200
HUSBAND AND WIFE—Cal and Ruth Ray, Eugene, Oreg.	198x200
LASS AA—Paul Kohler, Tekamah, Nebr.	200x200
LASS A—Levi Schick, Bellefontaine, Ohio.	200x200
LASS B—E. J. Ford, Birmingham, Mich.	199x200
LASS C—Earl Goetz, Mansfield, Ohio.	196x200
LASS D—George Allen, Lyndon, Ill.	195x200

SKET SHOOTING

Source: National Skeet Shooting Association.

National Championships, 1948

(at Las Vegas, Nevada, Sept. 16 to 25)

		Men	Score
		Event and winner	
		ALL-GAUGE—G. W. Van Buren, Fort Worth, Texas	249x250
		SERVICE INDIVIDUAL—G. W. Van Buren	249x250
		INDUSTRY ALL-GAUGE—D. Lee Braun, Dallas, Texas	248x250
		SENIOR—Dr. C. H. Metcalfe, Sudlersville, Md.	245x250
		JUNIOR—George Glass, Jr., Midland, Texas	240x100
		SUB-JUNIOR—Charles Prentiss, Fabens, Texas	96x100
		20-GAUGE—Ben Dilorio, Utica, N. Y.	100x100
		INDUSTRY 20-GAUGE—H. C. Russell, Minneapolis	100x100
		SMALL-GAUGE—Grant Ilseng, Houston, Texas	100x100
		INDUSTRY SMALL-GAUGE—J. V. Elliot, Jr., Pasadena, Calif.	100x100
		SUB-SMALL—Grant Ilseng	98x100
		INDUSTRY SUB-SMALL—D. Lee Braun	97x100
		HIGH-OVER-ALL—Grant Ilseng	543x550
		INDUSTRY HIGH-OVER-ALL—D. Lee Braun	543x550
		2-MAN ALL-GAUGE TEAM—Earl Stoner-M. M. Martin, California	493x500
		PARENT AND CHILD—Ben Dilorio, Sr.—Ben Dilorio, Jr.	484x500
		HUSBAND AND WIFE—Mr.—Mrs. J. J. Brown, Kansas	476x500
		2-MAN 20-GAUGE TEAM—H. Ehler-D. W. Conway, Texas	197x200
		2-MAN SMALL-GAUGE TEAM—Alex Kerr—Bob Stack, Calif.	195x200
		2-MAN SUB-SMALL TEAM—C. Poulton—J. Frost, Jr., Texas	189x200
		5-MAN TEAM—Texas	1223x1250
		SERVICE TEAM—San Diego NAS	1185x1250
		CHAMPION OF CHAMPIONS—Pete Read, San Angelo, Texas	100x100
		GOVERNOR OF NEVADA CHAMPIONSHIP—Ed Castagnetto, San Francisco	100x100
		HANDICAP	
		ALL-GAUGE—Lucretia Hamon, Dallas, Texas	100x100
		20-GAUGE—Tom Sanfilippo, San Francisco	100x100
		SMALL-GAUGE—Leon Haislip, Santa Ana, Calif.	99x100
		SUB-SMALL-GAUGE—Alex Kerr, Beverly Hills, Calif.	99x100
		MIXED GAUGE—D. W. Conway, Clint, Texas	98x100
		HIGH-OVER-ALL—Alex Kerr	489x500
		Women	
		ALL-GAUGE—Mrs. R. H. Martin, San Antonio, Texas	246x250
		20-GAUGE—Mrs. John Lafore, Jr., Haverford, Pa.	100x100
		SMALL-GAUGE—Mrs. Nancy Childs, Lake Kerr, Fla.	97x100
		SUB-SMALL—Janice Jenkins, Dallas, Texas	93x100
		HIGH-OVER-ALL—Mrs. R. H. Martin	530x550
		HANDICAP—Mrs. Helen M. Williams, Rochester, N. Y.	100x100

N.Y.A.C. Largest Athletic Club

The New York A. C., largest athletic organization in the world, owns the 24-story building at Seventh Avenue and Fifty-ninth street, New York. It has a gymnasium a city block long, a running track of twelve and one-third laps to a mile, a swimming pool with five clearly marked lanes to conform with A. A. U. standards, handball, squash, badminton, basketball and hand tennis courts, bowling alleys and fencing, wrestling, boxing and billiard rooms.

CRICKET

The Ashes, 1948

Australia won four matches in England for the first time in the history of test cricket and retained "The Ashes," mythical emblem of world supremacy in the sport. The other match resulted in a draw. After the last test match, Don Bradman, Australia's great player, announced that he was retiring from the game.

ARCHERY

Archery goes back through song and story and classic legend to the primeval days when bows and arrows were means of obtaining food and also weapons in warfare, but the invention of gunpowder in the 14th Century brought about a complete change in the hunting field and in the ranks of war. Archery survived only as a sport. One of the oldest annual sporting events in England is the archery contest for "The Ancient Scorton Arrow" (a little silver dart) that has been held each year in Yorkshire since 1673. The tradition

of archery survived in many European countries and many tournaments were held each year until World War II obliterated them. The American Indians, of course, used the bow and arrow until guns came into their hands through early explorers and settlers. Organized archery as a sport in the United States began with the formation of a club called the United Bowmen of Philadelphia in 1828. The sport languished through the Civil War period but was revived by the formation of the National Archery Association in 1878.

NATIONAL CHAMPIONS, 1948

Source: Mrs. George F. Crouch, Secretary, National Archery Association of the United States.

TARGET

MEN—Larry Hughes, Burbank, Calif.
WOMEN—Jean Lee, Greenfield, Mass.
JUNIOR BOYS'—Rowland Richards, Jr., Laguna Beach, Calif.
JUNIOR GIRLS'—Betty Bowersock, Toledo, Ohio

CLUB TEAM

MEN—Ozark Archery Club, Springfield, Mo.
WOMEN—Golden Gate Archers, San Francisco

FLIGHT

REGULAR STYLE

MEN—Jack Stewart, Austin, Texas
WOMEN—Verne Trittin, Salt Lake City, Utah
JUNIOR BOYS'—Thomas Lange, Tacoma, Wash.

FREE STYLE

MEN—Paul Berry, Middletown, Ohio
WOMEN—Ruth Diffendal, Osborn, Ohio

CLOUT

MEN (180 yd.)—Russ Reynolds, Cleveland
WOMEN (140 yd.)—Ann M. Weber, Bloomfield, N. J.
WOMEN—(120 yd.)—Verne Trittin
JUNIOR BOYS'—Richard Finks, Covington, Ky.
JUNIOR GIRLS'—Sharon Steinbrecher, Sheboygan Falls, Wis.

FIELD ARCHERY

MEN—Roy Dill, San Diego, Calif.
WOMEN—Mrs. Henry Bitzenburger, Los Angeles
JUNIOR BOYS'—David Webb, Wichita, Kans.

CROSSBOW

QUADRUPLE AMERICAN—Elwood H. Perkins, Oakland, Calif.

NATIONAL RECORDS

(All made in 1948 except where designated)

Target Scores

MEN

***SINGLE YORK**—Larry Hughes, Burbank, Calif. 143-881
DOUBLE YORK—Larry Hughes 282-1726
SINGLE AMERICAN—Russ Reynolds, Cleveland 90-752
DOUBLE AMERICAN—Russ Reynolds 180-1468
INDIVIDUAL TEAM ROUND—Russ Reynolds (1947) 96-766
TEAM ROUND—Ozark A. C., Springfield, Mo. (1947) 384-2647

WOMEN

SINGLE NATIONAL—Jean Lee, Greenfield, Mass. 72-544
DOUBLE NATIONAL—Jean Lee 144-1082
SINGLE COLUMBIA—Jean Lee 72-590
DOUBLE COLUMBIA—Jean Lee 144-1172
SINGLE AMERICAN—Jean Lee 90-708
DOUBLE AMERICAN—Jean Lee 180-1368
***HEREFORD**—Ann M. Weber, Bloomfield, N. J. 132-815
INDIVIDUAL TEAM ROUND—Ann M. Weber (1940) 96-718
TEAM ROUND—Essex Archers, Bloomfield, N. J. (1940) 383-2615

Range Distances

MEN

100-YD. YORK—Larry Hughes 72-434
***60-YD. AMERICAN**—Larry Hughes 30-240
50-YD. AMERICAN—Russ Reynolds 30-256

*Tied record.

WOMEN

60-YD. NATIONAL—Jean Lee 48-350
50-YD. NATIONAL—Jean Lee 24-166
***50-YD. COLUMBIA**—Jean Lee 24-194
***30-YD. COLUMBIA**—Ann M. Weber 24-210
50-YD. AMERICAN—Jean Lee 30-224
60-YD. AMERICAN—Ann M. Weber 30-244
40 YD. AMERICAN—Jean Lee 30-250

Flight Distances

MEN

CLASS 1—Bows weighing up to and including 50 pounds. **CLASS 2**—Bows weighing up to and including 65 pounds. **CLASS 3**—Bows weighing up to and including 80 pounds. **CLASS 4**—Bows of all weights.

Class	Distance	yd.	ft.	in.
1—Jack Stewart, Austin, Texas	552	2	4 1/2	
2—C. L. Haugen, Beloit, Wis.	557	0	8 1/2	
3—Irving H. Baker, Westfield, N. J.	601	1	7	
4—Jack Stewart	625	1	8 1/2	
FREE STYLE —Charles Pierson, Cincinnati (1946)	658	2	8	

WOMEN

CLASS 1—Bows weighing up to and including 35 pounds. **CLASS 2**—Bows weighing up to and including 50 pounds. **CLASS 3**—Bows of all weights.

Class	Distance	yd.	ft.	in.
1—Blanche Stewart, Austin, Texas	433	2	2	
2—Evelyn Haines, Warren, Pa.	455	0	2	
3—Verne Trittin, Salt Lake City, Utah	473	1	7 1/2	
FREE STYLE —Mrs. Cecil Modlin, Evansville, Ind. (1946)	564	0	6	

SKIING

SKIS were devised for utility, to aid those who had to travel over snow. The Norwegians, Swedes, Lapps and other inhabitants of northern lands used skis for many centuries before skiing became a sport. Emigrants from these countries brought skis to the United States with them. The first skier of record in the United States was a mailman by the name of "Snowshoe" Thomson, born and raised in Telemarken, Norway, who came to the United States and, beginning in 1850, used

skis through twenty successive winters in carrying mail from northern California to Carson Valley, Nevada.

Ski clubs sprang up about sixty years ago where there were Norwegian and Swedish settlers in Wisconsin and Minnesota and ski contests were held in that territory in 1886. On Feb. 21, 1904, at Ishpeming, Mich., a small group of skiers organized the National Ski Association that, with the rapid growth of the sport, now has approximately 300 member clubs.

Skiing Statistics

Source: National Ski Association of America.

Long Jumps (Official American)

Year	Made by and place	Distance, in feet
1904	T. Walters, Ishpeming, Mich.	82
1905	Gustave Bye, Red Wing, Minn.	106
1908	John Evenson, Ishpeming, Mich.	122
1910	August Nordby, Ishpeming, Mich.	140
1913	Lars Haugen, Steamboat Springs, Col.	185
1917	Henry Hall, Steamboat Springs, Col.	203
1919	Lars Haugen, Steamboat Springs, Col.	214
1932	Hans Beck, Lake Placid, N. Y.	235

Joseph Bradl of Austria holds the world long-jump record with a leap of 350.96 feet, made at Planica, Yugoslavia, in 1938.

1948 CHAMPIONSHIPS

NORTH AMERICAN

(At Aspen, Colorado, March 13-14)

Downhill and Slalom

DOWNHILL—Jack Reddish, Alta (Utah) S. C.	4m.25s.
SLALOM—Kalle Nergaard, Norway, and Jack Reddish (tie)	1m.50s.
COMBINED DOWNHILL AND SLALOM—Jack Reddish	0 pts.

WOMEN

DOWNHILL—Maud Banks, Aspen, Colo.	3m.50.2s.
SLALOM—Maud Banks	2m.26.2s.
COMBINED DOWNHILL AND SLALOM—Maud Banks	.0 pts.

Jumping and Cross-Country

(At Berlin, N. H., Feb. 28-29)

	Points
CLASS A—Hans Kaarstein, Oslo, Norway	229.5
CLASS B—Bernard Bliksted, Oslo, Norway	211.1
COMBINED JUMPING AND CROSS-COUNTRY—Reidar Andersen, Oslo, Norway	466.7

NATIONAL

Jumping

* (At Seattle, Wash., March 6 to 8)

	Jump dist. in feet	Points
CLASS A—Arne Ulland, Kongsberg, Norway	251 280	226.10
CLASS B—Neil Bergstrom, Kiwanis S. C., Iron Mountain, Mich.	217 238	212.90
CLASS C (under 18)—Billy Olsen, Eau Claire (Wis.) W. S. C.	202 197	217.25
VETERANS' (over 32)—George Kotlarek, Duluth (Minn.) S. C.	180 181	205.80

Cross Country, and Classic Combined

(At Duluth, Minn., Jan. 31-Feb. 1)

CLASS A, 18-KM. CROSS-COUNTRY—Trygve L. Nielsen, Wisconsin Hoofers, Madison	1h.1m.8s.
COMBINED JUMPING AND CROSS-COUNTRY—Robert Wright, St. Lawrence U., Canton, N. Y.	295.90 pts.

Year	Made by and place	Distance, in feet
1934	John Elvrum, Big Pines, Calif.	240
1937	Alf Engen, Salt Lake City, Utah	242
1939	Alf Engen, Big Pines, Calif.	251
1939	Bob Roecker, Iron Mountain, Mich.	257
1941	Alf Engen, Iron Mountain, Mich.	267
1941	Torger Tokle, Leavenworth, Wash.	273
1941	Torger Tokle, Olympian Hill, Hyak, Wash.	288
1942	Torger Tokle, Iron Mountain, Mich.	289

record with a leap of 350.96 feet, made at Planica,

Downhill and Slalom

(At Sun Valley, Idaho, March 27-28)

DOWNHILL, OPEN AND AMATEUR—Jack Reddish, Alta S. C.	2m.28.4s.
SLALOM, OPEN AND AMATEUR—Jack Reddish	2m.20.6s.
COMBINED, OPEN AND AMATEUR—Jack Reddish	303 pts.

WOMEN

DOWNHILL, OPEN AND AMATEUR—Jannette Burr, Seattle Mountaineers	1m.54.2s.
SLALOM, OPEN AND AMATEUR—Anne Winn, University of Utah S. C.	3m.10.6s.
COMBINED, OPEN AND AMATEUR—Suzanne Harris, Sun Valley S. C.	237 pts.

HOLMENKOLLEN CHAMPIONSHIPS, 1948

(At Norefjell, Roedkleiva, Nordmarka (Oslo) and Holmenkollbakken, Norway, Feb. 29 to March 7)

Source: Frank Elkins, The New York Times.

DOWNHILL—Stein Eriksen, Norway.....	2m.34.8s.	
SLALOM—Ake Nilsson, Sweden.....	2m.16.7s.	
COMBINED DOWNHILL AND SLALOM—Olle Dahlman, Sweden.....	4.40 pts.	
18-KM. CROSS-COUNTRY—Martin Lundstroem, Sweden.....	1h.13m.57s.	
50-KM. CROSS-COUNTRY—Harald Eriksson, Sweden.....	3h.30m.9s.	
COMBINED CROSS-COUNTRY AND JUMP—Simon Slattvik, Norway.....	443.28 pts.	
	Jump dist. in feet	Points
SPECIAL JUMPING—Arne Hoel, Norway.....	204 210	228.20
JUNIOR CLASS JUMPING—Arfinn Bergmann, Norway.....	196 181	215.00

WOMEN

DOWNHILL—Niskin Borghild, Norway	2m.3s.
SLALOM—Niskin Borghild	2m.42.5s.
COMBINED DOWNHILL AND SLALOM—Niskin Borghild	0 pts.

TABLE TENNIS

Source: United States Table Tennis Association (compiled by Victor B. Rupp).

World Champions

Year	Men's singles	Men's doubles
1927-28	R. Jacobi, Hungary	Jacobi-Pecsi, Hungary
1928-29	M. Mechlovits, Hungary	Liebster-Thum, Austria
1929-30	Fred Perry, England	Barna-Szabados, Hungary
1930-31	Viktor Barna, Hungary	Barna-Szabados, Hungary
1931-32	Miklos Szabados, Hungary	Barna-Szabados, Hungary
1932-33	Viktor Barna, Hungary	Barna-Szabados, Hungary
1933-34	Viktor Barna, Hungary	Barna-Glancz, Hungary
1934-35	Viktor Barna, Hungary	Barna-Szabados, Hungary
1935-36	Viktor Barna, Hungary	Barna-Szabados, Hungary
1936-37	Standa Kolar, Czechoslovakia	Blattner-McClure, United States
1937-38	Richard Bergmann, Austria	Blattner-McClure, United States
1938-39	Bohumil Vana, Czechoslovakia	McClure-Schiff, United States
1939-40	Richard Bergmann, Austria	Bergmann, Austria-Barna, Hungary
1940-46	No tournaments	No tournaments
1947-48	Verhuslav Vana, Czechoslovakia	Vana-Slar, Czechoslovakia
1948-49	Richard Bergmann, England	Vana-Steipek, Czechoslovakia

Year	Women's singles
1927-31	M. Mednyansky, Hungary
1932	A. Sipos, Hungary
1933	A. Sipos, Hungary
1934	Marie Kettnerova, Czechoslovakia
1935	Marie Kettnerova, Czechoslovakia
1936	Ruth Hughes Aarons, United States
1937	No tournament
1938	Trudi Pritzi, Austria
1939	Vlasha Depetrisova, Czechoslovakia
1940-46	No tournaments
1947	Giselle Farkas, Hungary
1948	Giselle Farkas, Hungary

Other World Champions, 1948

Men's team (Swaythling Cup)—Czechoslovakia
 Women's team (Corbillon Cup)—England
 Women's doubles—Mrs. Vera Thomas-Peggy Franks, England
 Mixed doubles—Dick Miles-Thelma Thall, United States

United States Champions

MEN'S SINGLES

1931	Marcus Schussheim, New York
1932	Coleman Clark, Chicago, Ill.*
	Marcus Schussheim, New York*
1933	James M. Jacobson, New Rochelle, N. Y.*
	Sidney Heitner, New York*
1934	James McClure, Indianapolis, Ind.*
	Sol Schiff, New York*
1935	A. Berenbaum, New York
1936	Viktor Barna, Hungary†
	Sol Schiff, New York†
1937	Laszlo Bellak, Hungary†
1938	Laszlo Bellak, Hungary
1939	James McClure, Indianapolis, Ind.
1940	Louis Pagliaro, New York
1941	Louis Pagliaro, New York
1942	Louis Pagliaro, New York
1943	William Holzrichter, Chicago, Ill.
1944	John Somael, New York
1945	Richard Miles, New York
1946	Richard Miles, New York
1947	Richard Miles, New York
1948	Richard Miles, New York

MEN'S DOUBLES

1932	James M. Jacobson-George T. Bacon, Jr., New Rochelle, N. Y.
1933	Paul Pearson-Edwin Lewis, Chicago, Ill.*
	Ralph Langsam-Lloyd Waterson, New York*
1934	Samuel Silberman-Alan Lobell, New York*
	Sol Schiff, New York-Manny Moskowitz, Rutherford, N. J.*
1935	A. Berenbaum, New York-Edward Silverglade, Trenton, N. J.
1936	James McClure, Indianapolis, Ind.-Robert Blattner, St. Louis, Mo.†
	James M. Jacobson, New Rochelle, N. Y.-Sol Schiff, New York†
1937	Laszlo Bellak, Hungary-Standa Kolar, Czechoslovakia†
1938	Sol Schiff, New York-James McClure, Indianapolis, Ind.
1939	Laszlo Bellak-Tibor Hazi, Hungary
1940	Sol Schiff, New York-James McClure, Indianapolis, Ind.
1941	Edward Pinner-Cy Sussman, New York
1942	Edward Pinner-Cy Sussman, New York
1943	Laszlo Bellak, New York-Tibor Hazi, Philadelphia, Pa.
1944	William Holzrichter, Chicago, Ill.-Laszlo Bellak, New York
1945	John Somael, New York-Max Hersh, Detroit, Mich.
1946	Edward Pinner-Cy Sussman, New York
1947	Douglas Cartland-Arnold Fetbrod, New York
1948	Tibor Hazi, Washington-John Somael, New York

*Co-champions. At the time there were two national associations, each with its own champion. †Open championships. ‡Closed championships.

WOMEN'S SINGLES

1933	Jessie Purves, Des Plaines, Ill.*
	Mrs. Fan Pockrose, New York*
1934	Ruth Hughes Aarons, Stamford, Conn.*
	Iris Little, Maplewood, N. J.*
1935	Ruth Hughes Aarons, Stamford, Conn.
1936	Ruth Hughes Aarons, Stamford, Conn.†
1937	Ruth Hughes Aarons, Stamford, Conn.†
1938	Emily Fuller, New York
1939	Emily Fuller, New York

1940	Sally Green, Indianapolis, Ind.
1941	Sally Green, Indianapolis, Ind.
1942	Sally Green, Indianapolis, Ind.
1943	Sally Green, Indianapolis, Ind.
1944	Sally Green, Indianapolis, Ind.
1945	Davidia Hawthorn, New York
1946	Bernice Charney, New York
1947	Leah Thall, Columbus, Ohio
1948	Peggy McLean, Hollis, N. Y.

*Co-champions. At the time there were two national associations, each with its own champion. †Open championship. ‡Closed championship.

POLO

POLO originated "somewhere east of Suez" but exactly where never has been determined. There is pictorial proof that it was played many centuries ago in Persia, Japan, China and Tibet, but it reached England by way of a border tribe in India known as the Manipuri. British army officers in India, about 1860, found the Manipuri playing polo and learned the game from them. The fact that the Manipuri used small native horses—they had no others—was the reason for the early height limit (14 hands) on polo mounts, from which arose the custom of calling them "polo ponies," which was abandoned in 1919.

In 1869 some officers of the 10th Hussars, returning from India, introduced the game in England and informal games were played with as many as eight players on a side. Formal competition at Hurlingham, the great shrine of the game, began in 1876 with five players on a side, which

number was cut to four in 1882. In 1884 an outstanding English player by the name of John Watson invented the backhand stroke and much improved the tactics of the game.

James Gordon Bennett, Jr., noted American newspaper owner and editor, saw polo at Hurlingham in 1875, brought the implements to this country, had a carload of cow ponies sent up from Texas and promoted a game that was played indoors at the Dickel Riding Academy at Fifth Avenue and 39th Street, New York City, in 1876. Polo moved outdoors to the Jerome Park race course and other suitable places soon after. One field on which it was played, at Fifth Avenue and 110th Street, was taken over by the New York baseball team in the National League and that is why the field on which the "Giants" play ball, although there since have been two changes in site, still is called "the Polo Grounds."

Polo Statistics

Source: United States Polo Association.

INTERNATIONAL MATCHES

Great Britain vs. United States

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| <p>1886 Won by Great Britain (10-4, 14-2) at Newport. R. I. Great Britain: No. 1, Capt. T. Hone; No. 2, Hon. R. Lawley; No. 3, Capt. Malcolm Little; Back, John Watson. United States: No. 1, Winthrop K. Thorne; No. 2, R. Belmont; No. 3, Foxhall P. Keene; Back, Thomas Hitchcock.</p> <p>1902 Won by Great Britain (1-2, 6-1, 7-1) at Hurlingham. Great Britain: No. 1, Cecil P. Nickalls; No. 2, P. W. Nickalls and F. M. Freake; No. 3, Walter Buckmaster and George A. Miller; Back, Charles D. Miller and Walter Buckmaster. United States: No. 1, R. L. Agassiz and J. M. Waterbury, Jr.; No. 2, J. E. Cowdin and Lawrence Waterbury; No. 3, Foxhall P. Keene; Back, Lawrence Waterbury and R. L. Agassiz.</p> <p>1909 Won by United States (9-5, 8-2) at Hurlingham. United States: No. 1, Lawrence Waterbury; No. 2, J. M. Waterbury, Jr.; No. 3, Harry Payne Whitney; Back, Devereux Milburn. Great Britain: No. 1, Capt. Herbert H. Wilson and Harry Rich; No. 2, F. M. Freake; No. 3, P. W. Nickalls; Back, Lord Wodehouse and Capt. J. Hardress Lloyd.</p> | <p>1911 Won by United States (4½-3, 4½-3½) at Meadow Brook. United States: No. 1, Lawrence Waterbury; No. 2, J. M. Waterbury, Jr.; No. 3, Harry Payne Whitney; Back, Devereux Milburn. Great Britain: No. 1, Capt. Leslie St. G. Cheape; No. 2, A. Noel Edwards; No. 3, Capt. J. Hardress Lloyd; Back, Capt. Herbert H. Wilson.</p> <p>1913 Won by United States (5½-3, 4½-4¼) at Meadow Brook. United States: No. 1, Lawrence Waterbury and Louis E. Stoddard; No. 2, J. M. Waterbury, Jr., and Lawrence Waterbury; No. 3, Harry Payne Whitney; Back, Devereux Milburn. Great Britain: No. 1, Capt. Leslie St. G. Cheape; No. 2, A. Noel Edwards and F. M. Freake; No. 3, Capt. R. G. Ritson, Back, Capt. Vivian N. Lockett.</p> <p>1914 Won by Great Britain (8½-3, 4-2¾) at Meadow Brook. Great Britain: No. 1, Capt. H. A. Tomkinson; No. 2, Capt. Leslie St. G. Cheape; No. 3, Maj. F. W. Barrett; Back, Capt. Vivian N. Lockett. United States: No. 1, Rene LaMontagne; No. 2, J. M. Waterbury, Jr.; No. 3, Devereux</p> |
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Milburn and Lawrence Waterbury; Back, Lawrence Waterbury and Devereux Milburn.

- 1921 Won by United States (11-4, 10-6) at Hurlingham. United States: No. 1, Louis E. Stoddard; No. 2, Thomas Hitchcock, Jr.; No. 3, J. Watson Webb, Back, Devereux Milburn. Great Britain: No. 1, Lt. Col. H. A. Tomkinson; No. 2, Maj. F. W. Barrett; No. 3, Lord Wodehouse; Back, Maj. Vivian N. Lockett.
- 1924 Won by United States (16-5, 14-5) at Meadow Brook. United States: No. 1, J. Watson Webb; No. 2, Thomas Hitchcock, Jr.; No. 3, Malcolm Stevenson and Robert E. Strawbridge Jr.; Back, Devereux Milburn. Great Britain: No. 1, Maj. T. W. Kirkwood and Lt. Col. T. P. Melvill; No. 2, Maj. F. W. Hurdall and Maj. G. H. Phipps-Hornby; No. 3, Maj. E. G. Atkinson; Back, Lewis L. Lacey.
- 1927 Won by United States (13-3, 8-5) at Meadow Brook. United States: No. 1, J. Watson Webb; No. 2, Thomas Hitchcock, Jr.; No. 3, Malcolm Stevenson; Back, Devereux Milburn. Great Britain: No. 1, Capt. Claude E. Pert and Capt. R. George; No. 2,

Maj. Austin H. Williams and Capt. J. P. Denning; No. 3, Capt. C. T. I. Roark; Back, Maj. E. G. Atkinson.

- 1930 Won by United States (10-5, 14-9) at Meadow Brook. United States: No. 1, Eric Pedley; No. 2, Earle A. S. Hopping; No. 3, Thomas Hitchcock, Jr.; Back, Winston F. C. Guest. Great Britain: No. 1, Gerald Balding; No. 2, Lewis L. Lacey; No. 3, Capt. C. T. I. Roark; Back, Humphrey P. Guinness.
- 1936 Won by United States (10-9, 8-6) at Hurlingham. United States: No. 1, Eric Pedley; No. 2, Michael G. Phipps; No. 3, Stewart B. Iglehart; Back, Winston F. C. Guest. Great Britain: No. 1, Hesketh H. Hughes; No. 2, Gerald Balding; No. 3, Eric H. Tyrrell-Martin; Back, Humphrey P. Guinness.
- 1939 Won by United States (11-7, 9-4) at Meadow Brook. United States: No. 1, Michael G. Phipps; No. 2, Thomas Hitchcock, Jr.; No. 3, Stewart B. Iglehart; Back, Winston F. C. Guest. Great Britain: No. 1, Robert Skene; No. 2, Aidan Roark; No. 3, Gerald Balding; Back, Eric H. Tyrrell-Martin.

Argentina vs. United States

- 1928 Won by United States (7-6, 7-10, 13-7) at Meadow Brook. United States: No. 1, W. A. Harriman; No. 2, Thomas Hitchcock, Jr., and E. A. S. Hopping; No. 3, Malcolm Stevenson and Thomas Hitchcock, Jr.; Back, Winston F. C. Guest. Argentina: No. 1, Arturo Kenny; No. 2, J. D. Nelson; No. 3, J. B. Miles; Back, Lewis L. Lacey.
- 1932 Won by United States (9-6, 7-8, 12-10) at Buenos Aires. United States: No. 1, Michael G. Phipps; No. 2, Elmer J. Boeseke, Jr.; No. 3,

Winston F. C. Guest; Back, William Post, 2d. Argentina: No. 1, Arturo Kenny; No. 2, J. D. Nelson and Martin Reynal; No. 3, Jose Reynal; Back, Manuel Andrada.

- 1936 Won by Argentina (21-9, 8-4) at Meadow Brook. Argentina: No. 1, Luis Duggan; No. 2, Roberto Cavanaugh; No. 3, Andres Gazzotti; Back, Manuel Andrada. United States: No. 1, G. H. Bostwick; No. 2, Gerald Balding; No. 3, Thomas Hitchcock, Jr.; Back, John Hay Whitney.

NATIONAL OPEN FINAL, 1948

(At Westbury, N. Y., Sept. 19)

HURRICANES (7)	GREAT NECK (6)
1—Larry Sheerlin	1—P. P. Grace Jr.
2—Peter Perkins	2—George Oliver
3—Cecil Smith	3—A. L. Corey Jr.
Back—Stephen Sanford	Back—Eddie O'Brien

SCORE BY PERIODS

Hurricanes	.....1	1	2	1	1	1—7
Great Neck	.....0	2	1	1	1	1—6

Goals—Hurricanes: Perkins 3, Smith 4. Great Neck: Grace, Oliver 3, Corey 2.

Referee—E. W. Hopping. Umpires—W. H. Gaylord and T. Q. Preece. Time of periods—7½ minutes.

INDOOR CHAMPIONS

NATIONAL SENIOR—Arlington Farms, Chicago
NATIONAL JUNIOR—Shamrocks, Milwaukee
SHERMAN MEMORIAL—Black Hawks, Chicago

WATERBURY CUP FINAL, 1948

(At Westbury, N. Y., Oct. 3)

HURRICANES (18)	WESTBURY (10)
1—Larry Sheerlin	1—Gil Gilmore
2—Peter Perkins	2—G. H. Bostwick
3—Cecil Smith	3—M. Christensen
Back—Stephen Sanford	Back—Devereux Milburn

SCORE BY PERIODS

Hurricanes	.....2	1	4	3	5	3—18
Westbury	.....8	1	0	1	0	0—10

Goals—Hurricanes: Sheerlin 4, Perkins 6, Smith 7. Sanford, Westbury: Gilmore, Bostwick, by handicap 8.

Referee—Earle W. Hopping. Umpires—Terrence Q. Preece and Mike Phipps. Time of periods—7½ minutes.

LAWN BOWLING

National Champions, 1948

SINGLES—Dick Auld, Niagara Falls, N. Y.
DOUBLES—John Proctor-William Smith, Chicago

NATIONAL OPEN POLO CHAMPIONS

Not held from 1905 to 1909, inclusive; 1911, 1915, 1917, 1918, and from 1942 to 1945, inclusive.

1904—WANDERERS —C. R. Snowden. —J. E. Cowdin. —J. M. Waterbury, Jr. ck—L. Waterbury.	1921—GREAT NECK 1—L. E. Stoddard. 2—R. Wanamaker, II. 3—J. W. Webb. Back—R. E. Strawbridge, Jr.	1929—HURRICANES 1—S. Sanford. 2—Capt. C. T. I. Roark. 3—J. W. Webb. Back—R. E. Strawbridge, Jr.	1937—OLD WESTBURY 1—M. G. Phipps. 2—C. Smith. 3—S. B. Iglehart. Back—C. V. Whitney.
1910—RANELAGH —R. N. Grenfell. —F. Grenfell. —Earl of Rocksavage. ck—F. A. Gill.	1922—ARGENTINE 1—J. B. Miles. 2—J. D. Nelson. 3—D. B. Miles. Back—L. L. Lacey.	1930—HURRICANES 1—S. Sanford. 2—E. L. Pedley. 3—Capt. C. T. I. Roark. Back—R. E. Strawbridge, Jr.	1938—OLD WESTBURY 1—M. G. Phipps. 2—C. Smith. 3—S. B. Iglehart. Back—C. V. Whitney.
1912—COOPERSTOWN —F. S. von Stade. —C. C. Rumsey. —C. P. Beadleston. ck—M. Stevenson.	1923—MEADOW BROOK 1—R. Belmont. 2—T. Hitchcock, Jr. 3—R. E. Strawbridge, Jr. Back—D. Milburn.	1931—SANTA PAULA 1—A. Gazzotti. 2—José Reynal. 3—Juan Reynal. Back—M. Andrada.	1939—BOSTWICK FIELD 1—G. H. Bostwick. 2—R. L. Gerry, Jr. 3—E. T. Gerry. Back—E. H. Tyrrell-Martin.
1913—COOPERSTOWN —F. S. von Stade. —C. C. Rumsey. —C. P. Beadleston. ck—M. Stevenson.	1924—MIDWICK 1—E. G. Miller. 2—E. L. Pedley. 3—A. P. Perkins. Back—C. F. Burke.	1932—TEMPLETON 1—M. G. Phipps. 2—W. F. C. Guest. 3—S. B. Iglehart. Back—R. R. Guest.	1940—AKNUSTI 1—G. S. Smith. 2—R. L. Gerry, Jr. 3—E. T. Gerry. Back—A. L. Corey, Jr.
1914—MEADOW BROOK MAGPIES —N. L. Tilney. —J. W. Webb. —W. G. Loew. ck—H. Phipps.	1925—ORANGE COUNTY 1—W. A. Harriman. 2—J. W. Webb. 3—M. Stevenson. Back—J. C. Cowdin.	1933—AURORA 1—S. H. Knox. 2—J. P. Mills. 3—E. T. Gerry. Back—E. J. Boeseke, Jr.	1941—GULF STREAM 1—J. H. A. Phipps. 2—M. G. Phipps. 3—C. S. von Stade. Back—A. L. Corey, Jr.
1916—MEADOW BROOK —H. Phipps. —C. C. Rumsey. —W. G. Loew. ck—D. Milburn.	1926—HURRICANES 1—S. Sanford. 2—E. L. Pedley. 3—Capt. C. T. I. Roark. Back—R. E. Strawbridge, Jr.	1934—TEMPLETON 1—M. G. Phipps. 2—W. F. C. Guest. 3—S. B. Iglehart. Back—R. R. Guest.	1946—HERRADURA 1—Gabriel Gracida. 2—Guillermo Gracida. 3—Alejandro Gracida. Back—José Gracida.
1919—MEADOW BROOK —F. H. Prince, Jr. —J. W. Webb. —F. S. von Stade. ck—D. Milburn.	1927—SANDS POINT 1—W. A. Harriman. 2—T. Hitchcock, Jr. 3—J. C. Cowdin. Back—L. E. Stoddard.	1935—GREENTREE 1—G. H. Bostwick. 2—T. Hitchcock, Jr. 3—G. Balding. Back—J. H. Whitney.	1947—OLD WESTBURY 1—P. Silvero 2—C. C. Combs 3—S. B. Iglehart Back—G. Oliver
1920—MEADOW BROOK —F. S. von Stade. —J. W. Webb. —R. E. Strawbridge, Jr. ck—D. Milburn.	1928—MEADOW BROOK 1—C. V. Whitney. 2—W. F. C. Guest. 3—J. B. Miles. Back—M. Stevenson.	1936—GREENTREE 1—G. H. Bostwick. 2—G. Balding. 3—T. Hitchcock, Jr. Back—J. H. Whitney.	1948—HURRICANES 1—L. Sheerin 2—P. Perkins 3—C. Smith Back—S. Sanford

HUNTS MEETING WINNERS, 1948

Spring	Fall
PRINGDALE CUP—Mrs. E. du Pont Weir's Canford	FOXCATCHER NATIONAL CUP—R. K. Mellon's Replica 2nd
ICHMOND PLATE—Mrs. S. C. Clark, Jr.'s Bill Coffman	REDDING FURNACE FARMS CHALLENGE CUP—Mrs. L. H. Kelly's Invulnerable
LOUIS LEITH CUP—Mrs. C. S. Richards' Tino Wave	ROLLING ROCK HUNT CUP—Walter Wickes, Jr.'s Big Bones
Y LADY'S MANOR POINT-TO-POINT—Mrs. De Witt Sage's Curwick Tim	INTERNATIONAL GOLD CUP—Walter Wickes, Jr.'s Big Bones
MARYLAND HUNT CUP—E. Q. McVitty's Peterski	PENNSYLVANIA HUNT CUP—W. J. Clother's Pine Pep
RAND NATIONAL POINT-TO-POINT—Mrs. G. B. Flaccus' Big Mike	FOXCATCHER PLATE—Mrs. W. D. Thomas' Battle-Torch
ADNOR HUNT CUP—S. R. Fry's Identity	MONMOUTH COUNTY HUNT CUP—Lee L. Chandler, 3d's Royal Mission
ATIONAL HUNT CUP—A. E. Pew, Jr.'s Mercury Sun	MONMOUTH COUNTY GOLD CUP—Allison Stern's Tourist Index
OSE TREE PLATE—Jack Grabosky's Mechanize	JERSEY HUNT CUP—Lee L. Chandler, 3d's Royal Mission
NELSON BUCKLEY CHALLENGE CUP—Harvey Fruehauf's Prolepsis	

MOTORBOATING

SINCE the source of power—the internal combustion engine—is the same in the motorboat as it is in the automobile, the history of motorboat racing parallels that of auto racing. There was a sporting risk in driving the early power boats. As soon as they began to show a degree of dependability, there came the informal rivalries of the rivers and lakes. These led to the formal contests of speed and endurance

over marked courses under the control of the American Power Boat Association. The races were severe tests of all parts of power boats and what was learned in the annual Gold Cup competition, which started in 1904, caused a great improvement in the designing of engines and hulls. The development of the outboard motor opened up another branch of power boat competition of wide popularity.

Motorboating Statistics

Source: American Power Boat Association and *Motor Boating Magazine*.

GOLD CUP WINNERS

Beginning with 1922 the race for the American Power Boat Association Gold Cup was open only to displacement boats of over 25 feet in length and powered with motors of not more than 625 inches piston displacement.

In 1946 the rules were liberalized to encourage the entry of smaller, less expensive craft. Boats now are required to be between 10 and 40 feet in length, with horsepower unlimited.

Year	Sponsor	Winner and owner	Time of best heat	Best heat speed m.p.h.
1904	Columbia Yacht Club.....	STANDARD, C. C. Riotte.....	1:33:30	23.6
1904	Columbia Y. C.....	VINGT-ET-UN II, W. Sharpe Kilmer.....	1:27:03	25.3
1905	Chippewa Bay Y. C.....	CHIP, J. Wainwright.....	1:52:38	15.9
1906	Chippewa Bay Y. C.....	CHIP II, J. Wainwright.....	1:27:01	20.6
1907	Chippewa Bay Y. C.....	CHIP II, J. Wainwright.....	1:25:43	20.8
1908	Chippewa Bay Y. C.....	DIXIE II, E. J. Schroeder.....	0:58:13	30.9
1909	Thousand Islands Y. C.....	DIXIE II, E. J. Schroeder.....	0:58:25	32.9
1910	Thousand Islands Y. C.....	DIXIE III, F. K. Burnham.....	0:57:14	33.6
1911	Frontenac Y. C.....	MIT II, J. H. Hayden.....	0:53:31	36.1
1912	Thousand Islands Y. C.....	P. D. Q. II, Alfred G. Miles.....	0:44:59	44.5
1913	Thousand Islands Y. C.....	ANKLE DEEP, C. S. Mankowski.....	0:41:03	50.49
1914	Lake George Reg. Assn.....	BABY SPEED DEMON II, Paula Blackton.....	0:42:41	48.5
1915	L. I. Sound P. B. A.....	MISS DETROIT, Miss Detroit P. B. A.....	0:41:21	49.7
1916	Miss Detroit P. B. A.....	MISS MINNEAPOLIS, Miss Minneapolis B. A.....	0:52:12	36.8
1917	Miss Minneapolis B. A.....	MISS DETROIT II, Garfield A. Wood.....	0:36:47	56.5
1918	Detroit Y. C.....	MISS DETROIT III, Detroit Yachtsmen.....	0:34:36	52.1
1919	Detroit Y. C.....	MISS DETROIT III, Garfield A. Wood.....	0:32:37	56.3
1920	Detroit Y. C.....	MISS AMERICA, Garfield A. Wood.....	0:25:44	70.0
1921	Detroit Y. C.....	MISS AMERICA, Garfield A. Wood.....	0:32:52	56.5
1922	Detroit Y. C.....	PACKARD-CHRIS CRAFT, J. G. Vincent.....	0:44:17.77	40.6
1923	Detroit Y. C.....	PACKARD-CHRIS CRAFT, J. G. Vincent.....	0:40:30	44.4
1924	Detroit Y. C.....	BABY BOOTLEGGGER, Caleb Bragg.....	0:33:48.61	46.4
1925	Columbia Y. C.....	BABY BOOTLEGGGER, Caleb Bragg.....	0:37:11	48.4
1926	Columbia Y. C.....	GREENWICH FOLLY, G. H. Townsend.....	0:36:34	49.22
1927	Indian Harbor Y. C.....	GREENWICH FOLLY, G. H. Townsend.....	0:35:18	50.99
1929	Red Bank & Columbia Y. C.....	IMP, R. F. Hoyt.....	0:35:39.04	50.489
1930	Red Bank & Columbia Y. C.....	HOTSY TOTS, V. Kliersrath.....	0:32:07	56.05
1931	Montauk Y. C.....	HOTSY TOTS, V. Kliersrath-R. Hoyt.....	0:32:46.47	54.92
1932	Montauk Y. C.....	DELPHINE IV, Horace E. Dodge.....	0:30:24	59.21
1933	Detroit Y. C.....	EL LAGARTO, G. Reis.....	0:29:34.4	60.866
1934	Lake George Club.....	EL LAGARTO, G. Reis.....	0:31:00.4	58.06
1935	Lake George Club.....	EL LAGARTO, G. Reis.....	0:31:16	57.582
1936	Lake George Club.....	IMPISH, Horace E. Dodge.....	0:38:13	47.120
1937	Detroit Y. C.....	NOTRE DAME, Herbert Mendelson.....	0:26:13.32	68.645
1938	Detroit Y. C.....	ALAGI, Theo Rossi.....	0:27:14.38	66.080
1939	Miss Detroit P. B. A.....	MY SIN, Z. G. Simmons, Jr.....	0:26:50.73	67.05
1940	Indian Harbor Y. C.....	HOTSY TOTS III, Sidney Allen.....	0:35:04.3	51.316
1941	Red Bank Reg. Assn.....	MY SIN, Z. G. Simmons, Jr.*.....	0:25:23.74	70.878
1946	Detroit Y. C.....	TEMPO VI, Guy Lombardo.....	0:31:33.6	57.02
1947	South Shore Y. C.....	MISS PEPS V, Walter, Roy and Russell Dossin.....	0:31:19.82†	57.452†
1948	Detroit Y. C.....	MISS GREAT LAKES, Albin Fallon.....		

*Only contestant. †Made by SUCH CRUST.

Records for One Mile

Class	Speed, m.p.h.	Date	Place	Boat and owner or driver
Limited hydroplane (U. S.)	124.915	9/20/32	Algonac, Mich.	MISS AMERICA X, Gar Wood
Limited hydroplane	141.74	8/19/39	Lake Coniston, Eng.	BLUE BIRD II, Sir M. Campbell
Old Cup	118.229	5/3/43	Desert Beach, Calif.	TEMPO VI, Guy Lombardo
5-cu.-in. hydroplane	64.685	10/25/41	Salton Sea, Calif.	TOP'S PUP, Jack Cooper
5-cu.-in. hydroplane	88.782	10/14/47	Salton Sea, Calif.	BLUE BLAZES, T. Caldwell
1-cu.-in. hydroplane	81.264	9/21/47	Washington, D. C.	UNCLE SAM, Edison Wedges
5-cu.-in. hydroplane, Div. I	88.786	10/17/40	Pictou, Ontario	VOODOO, Dave Foreman
5-cu.-in. hydroplane, Div. II	90.114	10/14/47	Salton Sea, Calif.	CALIFORNIA KID, Lon Graditi
Specific One design	55.004	10/14/47	Salton Sea, Calif.	CHERUB II, Louis Novotny
Snack Box	63.99	8/18/48	Elsinore, Calif.	SKIMON DEMON, George Zimmer

Records in Competition

Class	Distance	Speed, m.p.h.	Date	Place	Boat and owner or driver
Old Cup heat	30	70.878	9/ 2/46	Detroit, Mich.	TEMPO VI, Guy Lombardo
Old Cup race	90	68.072	9/ 2/46	Detroit, Mich.	TEMPO VI, Guy Lombardo
British International	30 (n)	89.913	9/ 6/31	Detroit, Mich.	MISS ENGLAND, Kaye Don
British International	5 (n)	93.017	9/ 6/31	Detroit, Mich.	MISS ENGLAND II, Kaye Don
President's unl. run	15	71.181	9/22/46	Washington, D. C.	MISS GREAT LAKES, Albin Fallon
International Sweepstakes	heat	76.140	8/25/40	Red Bank, N. J.	NOTRE DAME, H. Mendelson
International Sweepstakes	total race	66.809	8/25/40	Red Bank, N. J.	TOPS III, Jack Cooper
Single engine hydroplane	12 hours	63.17	9/30/29	Lake Rosseau, Can.	RAINBOW VIII, H. B. Greening
Single engine hydroplane	723.92 mi. 24 hours 1217.88 mi	50.78	10/23/25	Lake Rosseau, Can.	RAINBOW IV, H. B. Greening

(n) Nautical miles.

MAJOR EVENTS WINNERS, 1948

Old Cup (Detroit)—MISS GREAT LAKES, Danny Foster, Oakland, Calif.
 International Sweepstakes (Red Bank, N. J.)—ALJO V, Joe Van Blerck, Jr., Freeport, N. Y.
 Silver Cup (Detroit)—MISS CANADA III, Harold Wilson, Ingersoll, Ontario.
 President's Cup (Washington, D. C.)—SUCH CRUST, Dan Arena, Kent, Ohio.
 Werbach Trophy (Red Bank, N. J.)—LA-HALA, Norman Lauterbach, Ventnor, N. J., and Guy Lombardo, Freeport, N. Y.
 Harwood Trophy (New York City)—SO LONG, Bill Cantrell, Louisville, Ky.
 Henry Ford Memorial (Detroit)—TEMPO VI, Guy Lombardo

NATIONAL OUTBOARD CHAMPIONS, 1948

Class	Division I (Amateur)	Division II (Pro)
M HYDROPLANE	Don Whitfield	Ethel Altman
A HYDROPLANE	Roy Pedersen	Doug Creech
B HYDROPLANE	Hank Combs	Mabry Edwards
C HYDROPLANE	J. H. Sharp	Paul Wearly
F HYDROPLANE	Don Frazier	Jimmy Broadus
C SERVICE RUNABOUT	Ted Benda	Clyde Wiseman
C SERVICE HYDROPLANE	Hal Winzeler	Harold Abrams
C RACING RUNABOUT	Ted Benda	Clyde Wiseman
FREE-FOR-ALL (Amateurs and Professionals)	Joe Michelini	

FRENCH TENNIS CHAMPIONS, 1948

SINGLES—Frank Parker, Los Angeles
 WOMEN'S SINGLES—Mme. Nelly Landry, France
 DOUBLES—Jaroslav Drobny, Czechoslovakia, Lennart Bergelein, Sweden
 WOMEN'S DOUBLES—Mrs. Patricia C. Todd, La Jolla, Calif.-Doris Hart, Miami, Fla.
 MIXED DOUBLES—Mrs. Patricia C. Todd-Jaroslav Drobny

OTHER ROWING CHAMPIONS, 1948

Intercollegiate

ADAMS CUP—Harvard
 BLACKWELL CUP—Yale
 CARNEGIE CUP—Cornell
 CHILDS CUP—Princeton
 COMPTON CUP—Harvard
 EASTERN ASSN.—Harvard
 EASTERN ASSN. (150 LB.)—Princeton
 GOLDTHWAIT CUP (150 LB.)—Harvard
 OXFORD-CAMBRIDGE—Cambridge

IRISH CHAMPIONS, 1948

HAELIC FOOTBALL—Cavan
 HURLING—Waterford

U. S. NEGRO TENNIS CHAMPIONS, 1948

American (Negro) Tennis Association

SINGLES—George Stewart, Panama
 WOMEN'S SINGLES—Althea Gibson, Wilmington, N. C.
 DOUBLES—Dr. Hubert Eaton, Wilmington, N. C.-George Stewart
 WOMEN'S DOUBLES—Margaret Peters-Roumaine Peters, Tuskegee Institute, Ala.
 MIXED DOUBLES—Dr. R. Walter Johnson, Lynchburg, Va.-Althea Gibson

YACHTING

JASON sailed in search of the Golden Fleece. Cleopatra (according to Shakespeare) had a royal barge with purple sails. Columbus had three sailing ships when he crossed the Atlantic westward in 1492. But who the first sailor was and where he launched his primitive craft nobody ever will know. The word "yacht" is of Dutch origin and the first "yacht race" of record in the English language was a sailing contest from Greenwich to Gravesend and return in 1662 between a Dutch yacht and an English yacht designed and, at some part of the race, sailed by Charles II of England. The royal yacht won the contest.

The first yacht club was organized at Cork, Ireland, in 1720 under the name of the Cork Harbour Water Club, later changed to the Royal Cork Yacht Club. The Royal Yacht Squadron was organized

at Cowes in 1812 and the name changed to the Royal Yacht Club in 1820. The New York Yacht Club was organized aboard the Stevens schooner "Gimcrack" on July 30, 1844, and a clubhouse erected at Elysian Fields, Hoboken, N. J., the following year.

From that time until the Civil War races were held over courses starting from the water off the yacht club promontory. One course was to the Sandy Hook Lightship and return.

In 1850 the celebrated "America" was built by a group of New York yachtsmen and sent abroad to compete at Cowes. In a race around the Isle of Wight, with a special cup as a prize, the "America" defeated fourteen English boats and brought back the trophy that has been raced for as "the America's Cup" in many international yacht races since that time.

Yachting Statistics

AMERICA'S CUP RECORD

Figures in parentheses indicate number of races won

Dates	Winner, Owner, Country	Loser, Owner, Country
Aug. 22, 1851.....	AMERICA (1), J. C. Stevens, U. S.....	*AURORA, J. Le Marchant, England
Aug. 8, 1870.....	MAGIC (1), F. Osgood, U. S.....	CAMBRIA, J. Ashbury, England
Oct. 16-23, 1871.....	COLUMBIA (2), F. Osgood, U. S.....	LIVONIA (1), J. Ashbury, England
	SAPPHO (2), Wm. P. Douglass, U. S.	
Aug. 11-12, 1876.....	MADELINE (2), J. Dickerson, U. S.....	COUNTESS OF DUFFERIN, C. Gifford, Canada
Nov. 9-10, 1881.....	MISCHIEF (2), J. Busk, U. S.....	ATALANTA, A. Cuthbert, Canada
Sept. 14-16, 1885.....	PURITAN (2), J. Forbes, U. S.....	GENESTA, Sir R. Sutton, England
Sept. 9-11, 1886.....	MAYFLOWER (2), Gen. J. Paine, U. S.....	GALATEA, Lt. Henn, R. N., England
Sept. 17-30, 1887.....	VOLUNTEER (2), Gen. J. Paine, U. S.....	THISTLE, J. Bell, England
Oct. 7-13, 1893.....	VIGILANT (3), Messrs. Iselin-Morgan, U. S.....	VALKYRIE, Lord Dunraven, England
Sept. 7-12, 1895.....	DEFENDER (3), Messrs. Iselin-Morgan, U. S.....	VALKYRIE II, Lord Dunraven, England
Oct. 16-20, 1899.....	COLUMBIA (3), Messrs. Iselin-Morgan, U. S.....	SHAMROCK I, Sir Thomas Lipton, England
Sept. 28-Oct. 4, 1901.....	COLUMBIA (3), J. P. Morgan, U. S.....	SHAMROCK II, Sir Thomas Lipton, England
Aug. 22-Sept. 3, 1903.....	RELIANCE (3), Iselin, et al, U. S.....	SHAMROCK III, Sir Thomas Lipton, England
July 15-27, 1920.....	RESOLUTE (3), R. Emmons, et al, U. S.....	SHAMROCK IV (2), Sir Thomas Lipton, England
Sept. 13-17, 1930.....	ENTERPRISE (4), Aldrich-Vanderbilt, U. S.....	SHAMROCK V, Sir Thomas Lipton, England
Sept. 17-25, 1934.....	RAINBOW (4), H. S. Vanderbilt, U. S.....	ENDEAVOUR (2), T. O. M. Sopwith, England
July 31-Aug. 5, 1937.....	RANGER (4), H. S. Vanderbilt, U. S.....	ENDEAVOUR II, T. O. M. Sopwith, England

*Finished second.

First race held off Cowes, Isle of Wight, England; from 1870 to 1920 races held off New York Bay; from 1930 to 1937 races held off Newport, R. I.

YACHTING CHAMPIONS IN 1948

Source: John Rendel, *The New York Times*.

Scandinavian Gold Cup (six-meter)—United States (GOOSE, owned by George Nichols; sailed by Briggs Cunningham)
Seawanhaka Cup (six-meter)—United States (LLANORIA, Herman F. Whiton, skipper)
World Star Class—U. S. (TWIN STAR, Lockwood Pirie and Harry Rugeroni)
Women's National—Larchmont (N. Y.) Y. O. (Aileen Shields, skipper)
National Junior—Vineyard Haven, Mass. (Norman Douglas Cassell, skipper)
International Snipe—Argentina (Carlos and Jorge A. Villar)

International Comet—Owen P. Merrill, Edgewater Park, N. J.
International Lightning—Richard Bertram, Miami, Fla.
International Rhodes Bantam—Fred Scott, Skaneateles, N. Y.
International 110—Don Scholle, Larchmont, N. Y.
National Penguin—Runyon Colle, Jr., South Orange, N. J.
National Thistle—Gordon K. Douglas, Fountainsville, Ohio
International Class team match (Amorita Cup)—United States beat Bermuda

WORLD STAR CLASS CHAMPIONS

Source: George W. Elder, President, International Star Class Yacht Racing Association.

Year	Winner	Skipper	Skipper's fleet	Where held
1922	TAURUS.....	W. L. Inslee.....	Western L. I. Sound.....	Western L. I. Sound
1923	TAURUS.....	W. L. Inslee.....	Western L. I. Sound.....	Western L. I. Sound
1924	LITTLE BEAR.....	J. R. Robinson.....	Western L. I. Sound.....	Western L. I. Sound
1925	ACE.....	Adrian Iselin II.....	Western L. I. Sound.....	Western L. I. Sound
1926	RHODY.....	B. W. Comstock.....	Narragansett Bay.....	Western L. I. Sound
1927	TEMPE III.....	Walton Hubbard.....	Newport Harbor.....	Warwick, R. I.
1928	SPARKLER II.....	P. E. Edrington.....	New Orleans Gulf.....	Newport Beach, Calif.
1929	EEL.....	J. G. Johnson.....	Chesapeake Bay.....	New Orleans, La.
1930	PEGGY WEE.....	A. Knapp.....	Western L. I. Sound.....	Gibson Island, Md.
1931	COLLEEN.....	W. J. McHugh.....	Central L. I. Sound.....	Western L. I. Sound
1932	MIST.....	Edward Fink.....	Los Angeles Harbor.....	Southport, Conn.
1933	THREE STAR TWO.....	Glenn Waterhouse.....	E. San Francisco Bay.....	Los Angeles, Calif.
1934	BY-C.....	H. F. Beardslee.....	Newport Harbor.....	San Francisco, Calif.
1935	BY-C.....	H. F. Beardslee.....	Newport Harbor.....	Newport Beach, Calif.
1936	ACE.....	Adrian Iselin II.....	Western L. I. Sound.....	Rochester, N. Y.
1937	LECKY.....	Milton Wegeforth.....	San Diego Bay.....	Western L. I. Sound
1938	PIMM.....	Walter von Hutschler.....	Hamburg.....	San Diego, Calif.
1939	PIMM.....	Walter von Hutschler.....	Hamburg.....	Kiel, Germany
1940	RAMBUNCTIOUS.....	Jim Cowie.....	Los Angeles Harbor.....	San Diego, Calif.
1941	WENCH.....	George Fleitz.....	Los Angeles Harbor.....	Los Angeles, Calif.
1942	*	Harry G. Nye, Jr.....	Southern Lake Mich.....	Chicago, Ill.
1943	*	Arthur M. Deacon.....	Western L. I. Sound.....	Bay Shore, N. Y.
1944	*	Gerald Driscoll.....	San Diego Bay.....	Chicago, Ill.
1945	*	Malin Burnham.....	San Diego Bay.....	Stamford, Conn.
1946	WENCH II.....	George Fleitz.....	Los Angeles Harbor.....	Havana
1947	GEM II.....	Durward Knowles.....	Nassau, Bahamas.....	Los Angeles, Calif.
1948	TWIN STAR.....	Lockwood M. Pirie.....	Wilmette Harbor, Ill.....	Lisbon, Portugal

*Indicates skipper's series in which the contestants drew for local boats each day and brought their own sails.

BADMINTON

Source: John E. Garrod, American Badminton Association.

United States Champions

Men's Singles		Year	Men's Doubles
Walter R. Kramer, Detroit, Mich.	1937	Chester Goss—Donald Eversoll, Los Angeles, Calif.	
Walter R. Kramer, Detroit, Mich.	1938	Hamilton Law—Richard Yeager, Seattle, Wash.	
David G. Freeman, Pasadena, Calif.	1939	Hamilton Law—Richard Yeager, Seattle, Wash.	
David G. Freeman, Pasadena, Calif.	1940	Chester Goss—David G. Freeman, Pasadena, Calif.	
David G. Freeman, Pasadena, Calif.	1941	Chester Goss—David G. Freeman, Pasadena, Calif.	
David G. Freeman, Pasadena, Calif.	1942	Chester Goss—David G. Freeman, Pasadena, Calif.	
David G. Freeman, Pasadena, Calif.	1947	D. G. Freeman—Webster Kimball, Pasadena, Calif.	
David G. Freeman, Pasadena, Calif.	1948	Wynn Rogers, Arcadia, Calif.—D. G. Freeman.	

Women's Singles

Mrs. Del Barkhuff, Seattle, Wash.....	1937.....
Mrs. Del Barkhuff, Seattle, Wash.....	1938.....
Mary E. Whittemore, Boston, Mass.....	1939.....
Evelyn Boldrick, San Diego, Calif.....	1940.....
Thelma Kingsbury, Oakland, Calif.....	1941.....
Evelyn Boldrick, San Diego, Calif.....	1942.....
Ethel Marshall, Buffalo, N. Y.....	1947.....
Ethel Marshall, Buffalo, N. Y.....	1948.....

Women's Doubles

Mrs. Del Barkhuff—Zoe G. Smith, Seattle, Wash.....	1937.....
Mrs. Roy C. Bergman—Helen Gibson, Westport, Conn.....	1938.....
Mrs. Del Barkhuff—Zoe G. Smith, Seattle, Wash.....	1939.....
Elizabeth Anselm—Helen Zabriskie, Oakland, Calif.....	1940.....
Thelma Kingsbury—Janet Wright, Oakland, Calif.....	1941.....
Evelyn Boldrick, San Diego, Calif.....	1942.....
Thelma K. Scovil—Janet Wright, San Francisco, Calif.....	1947.....
Thelma K. Scovil—Janet Wright, San Francisco, Calif.....	1948.....

Mixed Doubles

1937—Mrs. Del Barkhuff—Hamilton Law, Seattle, Wash.....	1942—Sally L. Williams, Spokane, Wash.—David G. Freeman, Pasadena, Calif.....
1938—Mrs. Del Barkhuff—Hamilton Law, Seattle, Wash.....	1943-46—No tournaments.
1939—Zoe G. Smith—Richard Yeager, Seattle, Wash.....	1947—Mrs. Virginia Hill—Wynn Rogers, Burbank, Calif.....
1940—Sally L. Williams, Spokane, Wash.—David G. Freeman, Pasadena, Calif.....	1948—Mr. and Mrs. Clinton Stephens, Baltimore, Md.....
1941—Sally L. Williams, Spokane, Wash.—David G. Freeman, Pasadena, Calif.....	

Other U. S. Champions, 1948

VETERANS' DOUBLES—Frank Hinds, New York—Fred Fullin, Norwalk, Conn.

BOYS' SINGLES—Ronnie Ryan, Oakland, Calif.

GIRLS' SINGLES—Barbara Scarlett, Baltimore

BOYS' DOUBLES—William Kellogg, Glencoe, Ill.—Wilbur Bullen, Jr., Waban, Mass.

GIRLS' DOUBLES—Barbara Scarlett—Sue Devlin, Baltimore

JUNIOR MIXED DOUBLES—Marilyn Banks, Burbank, Calif.—Ronnie Ryan

CURLING

THE GAME OF CURLING is supposed to be of Dutch origin but it dates back to 1607 in Scotland and grew to be the national sport of that country. The action is something like bowling on ice and, for that matter, it is alleged to be an offshoot of lawn bowling. Circular stones (weight about 35 pounds in the United States, top limit 44 pounds in Great Britain) are sent sliding up and down the rinks toward targets called "tees" at either end. Each player uses two stones and a side or team consists of four players, one of whom is captain or "skip".

Formal competition in curling began

with the formation of the Grand Caledonian Curling Club in Scotland on Nov. 15, 1838. The title of the club was changed to "Royal" Caledonian Curling Club when Queen Victoria, with Albert, the Prince Consort, visited Scotland in 1842 and Prince Albert became a patron of the club. Scots who emigrated to Canada and the United States carried their love of the game with them and spread the enthusiasm to such an extent that, where climate permits, curling matches and "bonspiels" have become popular fixtures on the winter sports programs of the northern States and Canada.

CUP, MEDAL AND MATCH WINNERS, 1947-48

Source: Robert G. Kincaid, Secretary, Grand National Curling Club of America.

W. FRED ALLEN MEMORIAL MEDAL MATCH—New York Caledonian C. C., Hastings-on-the-Hudson.
BROOKLINE TROPHY—Ardsey C. C. No. 2, Hastings-on-the-Hudson, N. Y.
CLYDE PARK CUP—The Country Club, Brookline, Mass.
COUNTRY CLUB CUP—Kingston, Ontario.
DOUGLAS MEDAL—Hamilton, Ontario.
FRANCIS DYKES TROPHY—The Country Club No. 1, Brookline, Mass.
R. S. EMMET MEMORIAL MEDAL MATCH—Utica (N. Y.) C. C. No. 2.
GORDON CHAMPION RINK MEDAL—N. Y. Caledonian C. C.
GORDON INTERNATIONAL MEDAL—Canada (Heather No. 2, Montreal holder).

LAWRENCE GRIFFITH MEDAL—Mahopac C. C., Lake Mahopac, N. Y.
MITCHELL GOLD MEDAL CHAMPION RINK CLUB MATCH—LaCrosse, Wis.
MOHAWK TROPHY—Schenectady (N. Y.) C. C. No. 2.
PLAYLAND CUP—Mahopac C. C.
ROYAL CALEDONIAN TROPHY—Heather, Montreal.
ROYAL CALEDONIAN (consolation)—St. John's, Quebec.
HOWARD STOCKTON CUP—Royal Montreal C. C., Montreal.
UTICA CUP—St. Andrews Golf Club No. 4, Hastings-on-the-Hudson, N. Y.
DISTRICT ONE RINK MATCHES—Utica C. C.
DISTRICT TWO RINK MATCHES—Mahopac C. C.
DISTRICT THREE RINK MATCHES—The Country Club.

CHESS

Source: American Chess Bulletin of New York.

World Champions

1851-58 Adolph Anderssen, Breslau, Germany
1858-62 Paul Morphy, New Orleans, La.
1862-66 Adolf Anderssen, Breslau, Germany
1866-94 William Steinitz, Vienna, Austria
1894-1921 Emanuel Lasker, Berlin, Germany
1921-27 Jose R. Capablanca, Havana, Cuba
1927-35 Alexander A. Alekhine, Moscow, Russia
1935-37 Dr. Max Euwe, Amsterdam, The Netherlands
1937-46 Alexander A. Alekhine, Moscow, Russia*
1948- Mikhail Botvinnik, Leningrad, Russia

*Alekhine, a French citizen, died on March 23, 1946, leaving the world championship vacant.

WORLD TOURNAMENT, 1948

(At Moscow, Russia)

Final Standing of the Players

	Won	Lost
Mikhail Botvinnik, Russia.....	14	6
Vassily Smyslov, Russia.....	11	9
Samuel Reshevsky, United States.....	10½	9½
Paul Keres, Estonia.....	10½	9½
Dr. Max Euwe, The Netherlands.....	4	16

King's Plate to Last Mark

James Fair's Last Mark, ridden by Howard Bailey, won the eighty-ninth running of the King's Plate at Woodbine, Ontario. The victory was worth \$11,010 and fifty guineas.

United States Champions

1858-62 Paul Morphy, New Orleans, La.
1871-87 George H. Mackenzie, New York
1887-92 Max Judd, St. Louis, Mo.
1892-94 Simon Lipschuetz, New York
1894 Jackson W. Showalter, Georgetown, Ky.
1894 Albert B. Hodges, Staten Island, N. Y.*
1894-97 Jackson W. Showalter, Georgetown, Ky.
1897-1906 Harry Nelson Pillsbury, Boston, Mass.
1906-09 Jackson W. Showalter, Georgetown, Ky.
1909-36 Frank J. Marshall, New York
1936-44 Samuel Reshevsky, New York†
1944-46 Arnold S. Denker, New York
1946 Samuel Reshevsky, Boston
1948 Herman Steiner, Los Angeles

*Retired after winning return match with Showalter. †In 1942, Isaac I. Kashdan of New York was co-champion for a while because of a tie with Reshevsky in that year's tournament. Reshevsky won the playoff.

Adams Takes Open Title

Weaver W. Adams of Dedham, Mass., won the 1948 United States open chess championship at the annual tournament, held in Baltimore. Isaac I. Kashdan and George Kramer of New York and Olaf Ulvestad of Seattle, Wash., tied for second.

Who's Who in Sports

BASEBALL

- ALEXANDER, Grover C., b. St. Paul, Nebr., Feb. 26, 1887.
- APPLING, Luke, b. High Point, N. C., April 2, 1909.
- BLACKWELL, Ewell, Jr., b. Fresno, Calif., Oct. 23, 1922.
- BOUDREAU, Lou, b. Harvey, Ill., July 17, 1917.
- BRANNICK, Eddie, b. New York, N. Y., July 22, 1893.
- CHANDLER, A. B. (Happy), b. Corydon, Ky., July 14, 1898.
- CHAPMAN, Ben, b. Nashville, Tenn., Dec. 25, 1908.
- COAKLEY, Andy, b. Providence, R. I., Nov. 20, 1882.
- COBB, Tyrus R. (Ty), b. Banks County, Ga., Dec. 17, 1886.
- COCHRANE, Gordon S. (Mickey), b. Bridgewater, Mass., Apr. 6, 1903.
- CRONIN, Joe, b. San Francisco, Calif., Oct. 12, 1906.
- DEAN, Jerome H. (Dizzy), b. Holdenville, Okla., Jan. 16, 1911.
- DICKEY, Bill, b. Bastrop, La., June 6, 1907.
- DI MAGGIO, Dom, b. San Francisco, Calif., Feb. 12, 1918.
- DI MAGGIO, Joe, b. Martinez, Calif., Nov. 25, 1914.
- DUROCHER, Leo, b. West Springfield, Mass., July 27, 1906.
- DYER, Eddie, b. Morgan City, La., Oct. 11, 1900.
- EVANS, Billy, b. Chicago, Ill., Feb. 10, 1884.
- FELLER, Bobby, b. Van Meter, Iowa, Nov. 3, 1918.
- FOXX, Jimmy, b. Sudlersville, Md., Oct. 22, 1907.
- FRICK, Ford C., b. Wawaka, Ind., Dec. 19, 1894.
- FRISCH, Frank F., b. New York, N. Y., Sept. 9, 1898.
- GORDON, Joseph L. (Flash), b. Los Angeles, Calif., Feb. 18, 1915.
- GREENBERG, Henry (Hank), b. New York, N. Y., Jan. 1, 1911.
- GRIFFITH, Clark C., b. Clear Creek, Mo., Nov. 20, 1869.
- GRIMM, Charlie, b. St. Louis, Mo., Aug. 28, 1898.
- GROVE, Robert M. (Lefty), b. Lonaconing, Md., March 6, 1900.
- HARRIDGE, Will, b. Chicago, Ill., Oct. 16, 1886.
- HARRIS, Stanley R. (Bucky), b. Port Jervis, N. Y., Nov. 8, 1896.
- HEILMANN, Harry, b. San Francisco, Calif., Aug. 3, 1894.
- HEYDLER, John A., b. La Fargeville, N. Y., July 10, 1869.
- HORNSBY, Rogers, b. Winters, Tex., Apr. 27, 1896.
- KINER, Ralph, b. Santa Rita, N. M., Oct. 27, 1922.
- KLEM, Bill, b. Rochester, N. Y., Feb. 22, 1874.
- KUHEL, Joe, b. Cleveland, Ohio, June 25, 1906.
- LYONS, Ted, b. Lake Charles, La., Dec. 28, 1900.
- MC CARTHY, Joe, b. Philadelphia, Pa., Apr. 21, 1887.
- MC KECHNIE, William B., b. Wilkinsburg, Pa., Aug. 7, 1877.
- MACK, Connie, b. East Brookfield, Mass., Dec. 23, 1862.
- MEYER, Bill, b. Knoxville, Tenn., Jan. 14, 1893.
- NEWHOUSE, Hal, b. Detroit, Mich., May 20, 1921.
- O'NEILL, Steve, b. Minooka, Pa., July 6, 1891.
- OTT, Mel, b. Gretna, La., Mar. 2, 1909.
- RICKEY, Branch, b. Senecaville, Ohio, Dec. 20, 1881.
- ROBINSON, Jackie, b. Cairo, Ga., Jan. 31, 1919.
- ROWE, Lynwood T. (Schoolboy), b. Waco, Tex., Jan. 11, 1912.
- RUEL, Herold (Muddy), b. St. Louis, Mo., Feb. 20, 1896.
- SAWYER, Eddie, b. Westerly, R. I., Sept. 10, 1910.
- SHAUGHNESSY, Frank J., b. Albion, Ill., April 8, 1885.
- SHOTTON, Burt E., b. Brownhelm, Ohio, Oct. 18, 1884.
- SISLER, George H., b. Manchester, Ohio, Mar. 24, 1893.
- SOUTHWORTH, Billy, b. Harvard, Nebr., Mar. 9, 1893.
- SPEAKER, Tris, b. Hubbard, Tex., Apr. 4, 1888.
- STENGEL, Charles D. (Casey), b. Kansas City, Mo., July 30, 1890.
- TAYLOR, Zack, b. Yulee, Fla., July 27, 1893.
- TRAUTMAN, George M., b. Bucyrus, Ohio, Jan. 11, 1890.
- TRAYNOR, Harold J. (Pie), b. Framingham, Mass., Nov. 11, 1899.
- WAGNER, John P. (Hans), b. Mansfield, Pa., Feb. 24, 1874.
- WALKER, Fred (Dixie), b. Villa Rica, Ga., Sept. 24, 1910.
- WALTERS, Bucky, b. Philadelphia, Pa., April 19, 1910.
- WEISS, George M., b. New Haven, Conn., June 23, 1895.
- WILLIAMS, Ted, b. San Diego, Calif., Oct. 30, 1918.

BASKETBALL

- ALLEN, Forrest C. (Phog), b. Jamesport, Mo., Nov. 18, 1885.
- AUERBACH, Arnold, b. Brooklyn, N. Y., Sept. 20, 1917.
- BENNETT, Carl, b. Bluffton, Ind., Dec. 7, 1915.
- BISHOP, Ralph, b. Brooklyn, Oct. 1, 1915.
- CANN, Howard, b. Bridgeport, Conn., Oct. 11, 1895.
- FULKS, Joe, b. Birmingham, Ky., Oct. 26, 1921.
- GOTTIEB, Edward, b. Philadelphia, Pa., Sept. 15, 1899.
- HALE, Bruce, b. Medford, Oreg., Aug. 31, 1918.
- HOLMAN, Nat, b. N. Y. C., Oct. 19, 1896.
- JEANNETTE, Buddy, b. New Kensington, Pa., Sept. 15, 1917.
- JULIAN, Alvin, b. Reading, Pa., April 5, 1901.
- KUNDLA, John, b. Star Junction, Pa., July 3, 1916.
- LAPCHICK, Joe, b. Yonkers, N. Y., April 12, 1900.
- LEWIS, Grady, b. Boyd, Texas, March 25, 1917.
- LOEFFLER, Kenneth, b. Beaver Falls, Pa., April 14, 1904.
- McDERMOTT, Bob, b. Whitestone, N. Y., Jan. 7, 1916.
- MALANOWICZ, Edmund, b. Buffalo, N. Y., Dec. 30, 1910.
- MIKAN, George, b. Joliet, Ill., June 18, 1924.
- OLSEN, Harold, b. Rice Lake, Wis., May 12, 1895.
- RUPP, Adolph, b. Halstead, Kans., Sept. 2, 1901.
- SUESSENS, Ken, b. Burlington, Iowa, Oct. 23, 1916.

BOXING

- ARMSTRONG, Henry, b. St. Louis, Mo., Dec. 12, 1912.
- BRADDOCK, Jim, b. North Bergen, N. J., Dec. 6, 1905.
- BURNS, Tommy, b. Hanover, Canada, June 17, 1881.
- CERDAN, Marcel, b. Sid-Bel-Abbes, Algeria, Africa, July 22, 1916.
- COCHRANE, Freddie, b. Elizabeth, N. J., May 6, 1915.
- DEMPSEY, Jack, b. Manassa, Colo., June 24, 1894.
- GRAZIANO, Rocky, b. New York, N. Y., June 7, 1922.
- JACK, Beau, b. Augusta, Ga., Apr. 1, 1921.
- JACOBS, Mike, b. New York, N. Y., March 10, 1880.
- JEFFRIES, James J., b. Carroll, Ohio, Apr. 15, 1875.
- LANGFORD, Sam, b. Weymouth, N. Ireland, Feb. 12, 1880.
- LESNEVICH, Gus, b. Cliffside Park, N. J., Feb. 22, 1915.
- LOUGHRAN, Tommy, b. Philadelphia, Pa., Nov. 29, 1902.
- LOUIS, Joe, b. Lexington, Ala., May 13, 1914.
- MONAGHAN, Rinty, b. Belfast, Ireland, Aug. 21, 1920.
- ORTIZ, Manuel, b. Corona, Calif., July 2, 1916.
- PEP, Willie, b. Middletown, Conn., Nov. 20, 1922.
- ROBINSON, Ray, b. Detroit, Mich., May 3, 1920.
- ROSENBLOOM, Max, b. New York, N. Y., Sept. 6, 1904.
- SADDLER, Sandy, b. Boston, June 28, 1926.
- STEELE, Freddie, b. Tacoma, Wash., Dec. 18, 1912.
- TUNNEY, Gene, b. N. Y. C., May 25, 1898.
- WALCOTT, Joe, b. Merchantville, N. J., Jan. 31, 1914.
- WALKER, Mickey, b. Elizabeth, N. J., July 13, 1901.
- WILLARD, Jess, b. Pottawatomie County, Kans., Dec. 29, 1883.
- WILLIAMS, Ike, b. Brunswick, Ga., Aug. 2, 1923.
- ZALE, Tony, b. Gary, Ind., May 29, 1914.

FOOTBALL

- BATTLES, Cliff, b. Akron, Ohio, May 1, 1910.
- BAUGH, Sammy, b. Temple, Tex., Mar. 17, 1914.
- BELL, Bert, b. Philadelphia, Pa., Feb. 25, 1894.
- BIBLE, Dana X., b. Jefferson City, Tenn., Oct. 8, 1891.
- BIERMAN, Bernard W., b. Springfield, Minn., Mar. 11, 1894.
- BLAIK, Earl H., b. Detroit, Mich., Feb. 15, 1897.
- BROWN, Paul E., b. Norwalk, Ohio, Sept. 7, 1908.
- CLARK, Earl (Dutch), b. Fowler, Colo., Oct. 11, 1906.
- CONZELMAN, Jimmy, b. St. Louis, Mo., March 6, 1898.
- CRISLER, Herbert O. (Fritz), b. Earlville, Ill., Jan. 12, 1899.

Football—(cont.)

- ROWLEY, James H., b. Chicago, Ill., Sept. 10, 1902.
- AWSON, Lowell (Red), b. Minneapolis, Minn., Dec. 20, 1906.
- OBIE, Gil, b. Hastings, Minn., Jan. 31, 1879.
- ORAIIS, Gus, b. Chippewa Falls, Wis., July 2, 1891.
- UDLEY, Bill, b. Bluefield, Va., Dec. 24, 1921.
- DWARDS, Albert G. (Turk), b. Clarkston, Wash., Sept. 28, 1907.
- LAHERTY, Ray, b. Spokane, Wash., Sept. 1, 1904.
- RANGE, Harold (Red), b. Wheaton, Ill., June 13, 1904.
- ALAS, George, b. Chicago, Ill., Feb. 2, 1895.
- ARLOW, Dick, b. Philadelphia, Pa., Oct. 19, 1889.
- EFFELFINGER, W. W. (Pudge), b. Minneapolis, Minn., Dec. 20, 1887.
- FEIN, Mel, b. Redding, Calif., Aug. 22, 1909.
- TUTSON, Don, b. Pine Bluff, Ark., Jan. 31, 1913.
- NGRAM, Jonas H., b. Jeffersonville, Ind., Oct. 15, 1886.
- SBELL, Cecil, b. Houston, Texas, July 11, 1915.
- AMBEAU, E. L. (Curly), b. Green Bay, Wis., April 9, 1898.
- AYDEN, Elmer F., b. Davenport, Iowa, May 4, 1903.
- EAHY, Frank, b. O'Neill, Nebr., Aug. 21, 1908.
- LITTLE, Lou, b. Leominster, Mass., May 6, 1893.
- UCKMAN, Sid, b. Brooklyn, N. Y., Nov. 21, 1916.
- MC KEEVER, Ed., b. San Antonio, Texas, Aug. 25, 1910.
- MC LAUGHRY, DeOrmond (Tuss), b. Chicago, Ill., May 19, 1893.
- MC MILLIN, Alvin N. (Bo), b. Prairie Hill, Tex., Jan. 12, 1899.
- MICHELOSEN, Johnny, b. Pittsburgh, Pa., Feb. 13, 1915.
- NAGURSKI, Bronko, b. International Falls, Minn., Nov. 3, 1908.
- NEALE, Earle (Greasy), b. Parkersburg, W. Va., Nov. 6, 1891.
- NEVERS, Ernie, b. Willow River, Minn., June 11, 1903.
- NEYLAND, Robert, b. Greenville, Tex., Sept. 17, 1892.
- OWEN, Steve, b. Cleo Springs, Okla., April 21, 1898.
- PHELAN, Jimmy, b. Sacramento, Calif., Dec. 5, 1893.
- SHAUGHNESSY, Clark D., b. St. Cloud, Minn., Mar. 6, 1892.
- SHAW, Lawrence T. (Buck), b. Mitchellville, Iowa, March 28, 1899.
- SMITH, Maurice (Clipper), b. Manteno, Ill., Oct. 15, 1898.
- SPEARS, Dr. Clarence W., b. De Witt, Ark., July 24, 1894.
- STAGG, A. Alonzo, b. West Orange, N. J., Aug. 16, 1862.
- STRONG, Ken, b. West Haven, Conn., Apr. 21, 1906.
- STUHLREHER, Harry A., b. Massillon, Ohio, Oct. 14, 1901.
- THOMAS, Frank, b. Muncie, Ind., Nov. 15, 1898.
- THORPE, Jim, b. near Prague, Okla., May 28, 1886.
- VOYLES, Carl, b. McCloud, Okla., Aug. 11, 1902.
- WADE, Wallace, b. Trenton, Tenn., June 15, 1892.
- WARNER, Glenn S., b. Springville, N. Y., Apr. 5, 1871.
- WATERFIELD, Bob, b. Elmira, N. Y., July 26, 1920.
- GOLF**
- ARMOUR, Tommy, b. Edinburgh, Scotland, Sept. 24, 1895.
- BOTTON, Henry, b. Jan. 26, 1907.
- DEMARET, Jim, b. Houston, Texas, May 10, 1910.
- UDLEY, Ed., b. Brunswick, Ga., Feb. 10, 1902.
- FERRIER, Jim, b. Manly, Australia, Feb. 24, 1915.
- HAGEN, Walter, b. Rochester, N. Y., Dec. 21, 1892.
- HARMON, Claude, b. Savannah, Ga., July 14, 1916.
- HOGAN, Ben, b. Dublin, Tex., Aug. 13, 1912.
- ONES, Bobby, b. Atlanta, Ga., Mar. 17, 1902.
- LITTLE, W. Lawson, Jr., b. Newport, R. I., June 23, 1910.
- LOCKE, Arthur D. (Bobby), b. Germiston, Transvaal, South Africa, Nov. 20, 1917.
- MC SPADEN, Harold (Jug), b. Rosedale, Kans., July 21, 1908.
- MANGRUM, Lloyd, b. Dallas, Texas, Aug. 1, 1914.
- NELSON, Byron, b. Fort Worth, Tex., Feb. 4, 1912.
- OLIVER, Ed (Porky), b. Wilmington, Del., Sept. 6, 1916.
- ORCUTT, Maureen, b. New York, N. Y., Apr. 1, 1907.
- RIEGEL, Robert H. (Skee), b. New Bloomfield, Pa., Nov. 25, 1914.
- SARAZEN, Gene, b. Harrison, N. Y., Feb. 27, 1902.

Golf—(cont.)

- SHUTE, Denny, b. Cleveland, Ohio, Oct. 25, 1904.
 STRANAHAN, Frank R., b. Toledo, Ohio, Aug. 5, 1922.
 SUGGS, Louise, b. Atlanta, Ga., Sept. 7, 1923.
 SNEAD, Sam, b. Hot Springs, Va., May 27, 1912.
 TURNESA, Joe, b. New York, N. Y., Jan. 31, 1901.
 TURNESA, Willie, b. Elmsford, N. Y., Jan. 20, 1914.
 VARE, Glenna Collett, b. New Haven Conn., June 20, 1903.
 VINES, H. Ellsworth, Jr., b. Los Angeles Calif., Sept. 28, 1911.
 WARD, Marvin H. (Bud), b. Olympia Wash., May 1, 1913.
 WORSHAM, Lew, b. Alta Vista, Va., Oct. 5, 1917.
 ZAHARIAS, Mildred Didrikson (Babe), b. Port Arthur, Tex., June 26, 1913.

HOCKEY

- APPS, Sylvanus, b. Paris, Ontario, Jan. 18, 1915.
 BENTLEY, Doug, b. Delisle, Saskatchewan, Sept. 3, 1916.
 BENTLEY, Max, b. Delisle, Saskatchewan, March 1, 1920.
 BLAKE, Hector (Toe), b. Victoria Mines, Ontario, Aug. 21, 1912.
 BOUCHER, Frank, b. Ottawa, Ontario, Oct. 7, 1901.
 BRIMSEK, Charles, b. Eveleth, Minn., Sept. 26, 1915.
 BRODA, Walter (Turk), b. Brandon, Manitoba, May 15, 1914.
 CAMPBELL, Clarence, b. Fleming, Saskatchewan, July 9, 1905.
 CLAPPER, Aubrey V. (Dit), b. Newmarket, Ontario, Feb. 9, 1907.
 CONACHER, Charlie, b. Toronto, Ontario, Dec. 10, 1909.
 CONACHER, Roy, b. Toronto, Ontario, Oct. 5, 1916.
 DAY, C. H. (Happy), b. Owen Sound, Ontario, June 1, 1901.
 DURNAN, Bill, b. Toronto, Ontario, Jan. 22, 1915.
 GOTTSSELIG, Johnny, b. Odessa, Russia, June 24, 1905.
 IRVIN, Dick, b. Hamilton, Ontario, July 19, 1892.
 IVAN, Tommy, b. Toronto, Ontario, Jan. 31, 1911.
 LUMLEY, Harry, b. Owen Sound, Ontario, Nov. 11, 1926.
 PATRICK, Lester, b. Drummondville, Quebec, Dec. 31, 1883.
 REARDON, Kenny, b. Winnipeg, Manitoba, April 1, 1921.
 RICHARD, Maurice, b. Montreal, Quebec, Aug. 4, 1921.
 ROSS, Arthur H., b. Naughton, Ontario, Jan. 13, 1886.
 SCHMIDT, Milt, b. Kitchener, Ontario, March 5, 1918.
 SHORE, Eddie, b. Fort Qu'Appelle, Saskatchewan, Nov. 26, 1902.
 SMYTHE, Conn, b. Toronto, Ontario, Feb. 1, 1895.

HORSE RACING

- ARCARO, Eddie, b. Cincinnati, Ohio, Feb. 19, 1916.
 ATKINSON, Ted, b. Toronto, Ontario, June 17, 1916.
 CASSIDY, Marshall, b. Washington, D. C., Feb. 21, 1892.
 CHRISTMAS, E. A., b. Upper Marlboro, Md., Oct. 10, 1903.
 FITZSIMMONS, James (Sunny Jim), b. Sheephead Bay, N. Y., July 23, 1874.
 HIRSCH, Max, b. Fredericksburg, Texas, July 12, 1880.
 JACOBS, Hirsch, b. New York, N. Y., April 8, 1904.
 JESSOP, Job Dean, b. Nibley, Utah, Dec. 4, 1926.
 JONES, Ben A., b. Parnell, Mo., Dec. 31, 1882.
 JONES, H. A. (Jimmy), b. Parnell, Mo., Nov. 24, 1906.
 LONGDEN, Johnny, b. Wakefield, England, Feb. 14, 1910.
 MEHRTENS, Warren, b. Brooklyn, N. Y., Nov. 5, 1920.
 PERMANE, Bobby, b. Camden, N. J., Jan. 21, 1924.
 SANDE, Earl, b. Groton, S. D., Nov. 19, 1898.
 WINN, Matt J., b. Louisville, Ky., June 30, 1861.
 WOODWARD, William, b. New York, N. Y., April 7, 1876.

TENNIS

- BAKER, Lawrence A., b. Lowndesville, S. C., June 20, 1890.
 BETZ, Pauline, b. Dayton, Ohio, Aug. 6, 1919.
 BROUGH, A. Louise, b. Oklahoma City Okla., March 11, 1923.
 BUDGE, J. Donald, b. Oakland, Calif., June 13, 1915.

Tennis—(cont.)

- J PONT, Margaret Osborne, b. Joseph, Oreg., March 4, 1918.
- ALKENBURG, Robert, b. New York, N. Y., Jan. 29, 1926.
- RY, Shirley, b. Akron, Ohio, June 30, 1927.
- ONZALES, Richard, b. Los Angeles, May 9, 1928.
- ART, Doris, b. St. Louis, Mo., June 20, 1925.
- ACOBS, Helen Hull, b. Globe, Ariz., Aug. 6, 1908.
- RAMER, John A., b. Las Vegas, Nev., Aug. 1, 1921.
- ARBLE, Alice I., b. Plumas County, Calif., Sept. 28, 1913.
- ULLOY, Gardner, b. Miami, Fla., Nov. 22, 1914.
- ARKER, Frank A., b. Milwaukee, Wis., Jan. 31, 1916.
- RICHARDS, Vincent, b. New York, N. Y., March 20, 1903.
- RIGGS, Robert L., b. Los Angeles, Calif., Feb. 25, 1918.
- ROARK, Helen Wills Moody, b. Centerville, Calif., Oct. 6, 1905.
- SCHROEDER, Ted., b. Newark, N. J., July 20, 1921.
- SEGURA, Francisco, b. Guayaquil, Ecuador, June 20, 1921.
- TALBERT, Billy, b. Cincinnati, Ohio, Sept. 4, 1918.
- TILDEN, William T., II, b. Philadelphia, Pa., Feb. 10, 1893.
- TODD, Patricia Canning, b. San Francisco, Calif., July 22, 1922.
- WARD, Holcombe, b. New York, N. Y., Nov. 23, 1878.

OTHER SPORTS

- ARTHOLOMEW, Ken, b. Leonard, N. D., Feb. 10, 1920 (Speed skating).
- INGHAM, William J., b. Norristown, Pa., Aug. 8, 1889 (Athletic director).
- RUNDAGE, Avery, b. Detroit, Mich., Sept. 28, 1887 (Executive).
- USHNELL, Asa S., b. Springfield, Ohio, Feb. 2, 1900 (Executive).
- OCHLAN, Welker, b. Manson, Iowa, Oct. 7, 1896 (Billiards).
- OFFEY, Jack, b. New York, N. Y., Jan. 28, 1888 (Athletic director).
- ROMWELL, Dean B., b. Turner, Oreg., Sept. 20, 1879 (Track and Field).
- URTIS, Ann, b. San Francisco, Calif., Mar. 6, 1926 (Swimming).
- EMAR, Clarence, b. Melrose, Mass., Mar. 20, 1888 (Marathon).
- EVLIN, Arthur, b. Lake Placid, N. Y., Sept. 7, 1923 (Skiing).
- DERLE, Gertrude, b. New York, N. Y., Oct. 23, 1906 (Swimming).
- LLING, Emil Von, b. New York, N. Y., Mar. 30, 1883 (Track and Field).
- NGEN, Alf, b. Nordal, Norway, May 15, 1909 (Skiing).
- ALCARO, Joe, b. Naples, Italy, Jan. 3, 1896 (Bowling).
- ERRIS, Dan, b. Pawling, N. Y., July 7, 1899 (Track and Field).
- REENLEAF, Ralph, b. Monmouth, Ill., Nov. 3, 1899 (Billiards).
- HENRY, Ken, b. Chicago, Ill., Jan. 7, 1929 (Speed skating).
- HOPPE, Willie, b. Cornwall, N. Y., Oct. 11, 1887 (Billiards).
- KILPATRICK, John Reed, b. New York, N. Y., June 15, 1889 (Executive).
- KIPHUTH, Robert J. H. (Bob), b. Tona-wanda, N. Y., Nov. 17, 1890 (Athletic director).
- LAMB, Delbert, b. Milwaukee, Wis., Oct. 22, 1914 (Speed skating).
- OWENS, Jesse, b. Decatur, Ala., Sept. 12, 1913 (Track and Field).
- PALIN, Sep. F., b. Rushville, Ind., April 11, 1876 (Harness racing).
- RICE, Grantland, b. Murfreesboro, Tenn., Nov. 1, 1880 (Writer).
- RUDD, Birger, b. Kongsberg, Norway, Aug. 23, 1911 (Skiing).
- SCHAEFER, Jake, b. Chicago, Ill., Oct. 18, 1894 (Billiards).
- VANDERBILT, Harold S., b. Oakdale, N. Y., July 6, 1884 (Yachting).
- VARIAPAPA, Andy, b. Italy, Mar. 31, 1894 (Bowling).
- WEBER, Ernest, b. Mainz, Germany, Feb. 29, 1908 (Walking).
- WERKET, John R., b. St. Paul, Minn., Oct. 8, 1924 (Speed skating).
- WHITE, Ben, b. Whiteville, Ontario, Feb. 5, 1873 (Harness racing).

Three Conquer English Channel

Gianni Gambi of Italy, Tom Blower of England and Hassan Abd el Rehim of Egypt were successful in swimming the English Channel in 1948. Blower's trip was from England to France, while the other two went in the opposite direction.

England Field Hockey Victor

England won the women's world field hockey championship in 1948 by beating the Netherlands, 1 to 0, in the final of the tournament, held at Amsterdam. Scotland finished third, Ireland fourth and the United States fifth.

HORSE RACING

ANCIENT DRAWINGS on stone and bone prove that horse racing is at least 3000 years old, but Thoroughbred Racing is a modern development. Practically every thoroughbred in training today traces its registered ancestry back to one or more of three sires that arrived in England about 1728 from the Near East and became known, from the names of their owners, as the Byerly Turk, the Darley Arabian and the Godolphin Arabian. The Jockey Club (English) was founded at Newmarket in 1750 or 1751 and became the custodian of the Stud Book as well as the court of last resort in deciding turf affairs.

There was horse racing in this country before the Revolution, but the great lift to the breeding industry came with the importation in 1798, by Col. John Hoomes of Virginia, of Diomed, winner of the Epsom Derby of 1780. Diomed's lineal descendants included such famous stars of the American turf as American Eclipse and Lexington. From 1800 to the time of the Civil War there were race courses and breeding establishments plentifully scattered through Virginia, North Carolina, South Carolina, Tennessee, Kentucky and

Louisiana. In fact, thoroughbred racing was largely a Southern sport and that was one reason why the Confederacy had such excellent cavalry in the Civil War. A century ago crack horses were matched in four-mile races that were run in heats, best two out of three!

The oldest stake event in North America is the King's Plate, a Canadian fixture that was first run in the Province of Quebec in 1836. The oldest stake event in the United States is The Travers, which was first run at Saratoga in 1864. The gambling that goes with horse racing and the trickery by jockeys, trainers, owners and track officials caused attacks on the sport by reformers and a demand among horse racing enthusiasts for an honest and effective control of some kind, but nothing of lasting value to racing came of this until the formation of The Jockey Club in 1894. The Jockey Club, composed of fifty members chosen from the aristocracy of the turf, was all-powerful in racing regulation until the State Racing Commission came into being as a result of mutual betting and the great revenues that came with the tax on the "daily handle".

Horse Racing Statistics

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HISTORY OF TRADITIONAL STAKES

AMERICAN DERBY

Washington Park; 3-year-olds; 1¼ miles.

Run at Washington Park, Chicago, prior to 1905; run at Hawthorne, 1916. Distance 1½ miles until 1928.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1884	Modesty.....	I. Murphy.....	117	\$10,700	1927	Hydromel.....	L. McDermott....	116	22,75
1885	Volante.....	I. Murphy.....	123	9,570	1928	Toro.....	E. Ambrose.....	126	21,92
1886	Silver Cloud.....	I. Murphy.....	121	8,160	1929	Windy City.....	L. McDermott....	118	47,55
1887	C. H. Todd.....	Hamilton.....	118	13,690	1930	Reveille Boy.....	W. Fronk.....	118	51,20
1888	Emperor of Norfolk.....	I. Murphy.....	123	14,340	1931	Mate.....	G. Ellis.....	126	48,67
1889	Spokane.....	T. Kiley.....	121	15,400	1932	Gusto.....	S. Coucci.....	118	48,20
1890	Uncle Bob.....	T. Kiley.....	115½	15,260	1933	Mr. Khayyam.....	P. Walls.....	121	23,41
1891	Strathmeath.....	Covington.....	112	18,610	1934	Cavalcade.....	M. Garner.....	126	23,31
1892	Carlsbad.....	R. Williams.....	122	16,930	1935	Black Helen.....	D. Meade.....	118	25,02
1893	Boundless.....	E. Garrison.....	122	49,500	1937	Dawn Play.....	L. Balaski.....	116	25,40
1894	Rey el S'ta A'ta.....	E. Van Kuren.....	122	19,750	1940	Mioland.....	J. Adams.....	123	44,90
1898	Pink Coat.....	W. Martin.....	127	9,225	1941	Whirlaway.....	A. Robertson.....	126	44,97
1900	Sidney Lucas.....	J. Bullman.....	122	9,425	1942	Alsab.....	G. Woolf.....	126	60,85
1901	Robert Waddell.....	J. Bullman.....	119	19,275	1943	Askmenow.....	G. Woolf.....	115	56,15
1902	Wyeth.....	L. Lyne.....	122	19,875	1944	By Jimminy.....	G. Woolf.....	122	61,65
1903	The Picket.....	Helgesen.....	115	27,025	1945	Fighting Step.....	G. South.....	118	68,95
1904	Highball.....	G. C. Fuller.....	122	26,325	1946	Eternal Reward.....	R. Campbell.....	118	83,45
1916	Dodge.....	F. Murphy.....	126	6,850	1947	Fervent.....	D. Dodson.....	118	70,95
1926	Boot to Boot.....	A. Johnson.....	121	89,000	1948	Citation.....	E. Arcaro.....	126	66,45

ARLINGTON FUTURITY

Arlington Park; 2-year-olds; 3/4 mile.

National Futurity in 1927 and 1928. Run at Washington Park from 1943 to 1945, inclusive.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1927	Misstep	E. Pool	122	\$9,360	1939	Andy K.	J. E. Oros	114	33,735
1928	Double Heart	L. Geving	115	21,920	1940	Swain	J. Adams	117	34,470
1932	Ladysman	R. Jones	117	38,010	1941	Sun Again	W. Eads	122	34,655
1933	Far Star	D. Bellizzi	116	31,020	1942	Occupation	L. Balaski	117	51,500
1934	Toro Nancy	R. Jones	112	41,725	1943	Jezrahel	O. Grohs	116	48,650
1935	Grand Slam	J. Bryson	122	45,135	1944	Free for All	O. Grohs	122	48,525
1936	Case Ace	A. Robertson	117	36,540	1945	Spy Song	S. Brooks	122	58,650
1937*	Tiger	A. Robertson	122		1946	Cosmic Bomb	S. Clark	122	66,875
	Teddy's Comet	G. Smith	117	18,000	1947	Piet	Dell Jessop	122	66,900
1938	Thingumabob	E. Arcaro	117	31,110	1948	Mr. Busher	F. Zufelt	122	62,725

*Dead heat.

BELMONT STAKES

Belmont Park; 3-year-olds; 1 1/2 miles.

Run at Jerome Park prior to 1890; run at Morris Park from 1890 to 1905. Distance 1 3/4 miles prior to 1874; reduced to 1 1/2 miles, 1874; reduced to 1 1/4 miles, 1890; changed to 1 1/2 miles, 1893; increased to 1 1/4 miles, 1895; increased to 1 3/4 miles, 1896; changed to 1 1/2 miles in 1904 and 1905; increased to 1 1/2 miles, 1926.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1867	Ruthless	J. Gilpatrick	107	\$1,850	1907	Peter Pan	G. Mountain	126	22,765
1868	General Duke	R. Swim	110	2,800	1908	Colin	J. Notter	126	22,765
1869	Fenian	C. Miller	110	3,350	1909	Joe Madden	E. Dugan	126	24,550
1870	Kingfisher	W. Dick	110	3,750	1910	Sweep	J. Butwell	126	9,700
1871	Harry Bassett	W. Miller	110	5,450	1913	Prince Eugene	R. Troxler	109	2,825
1872	Joe Daniels	J. Rowe	110	4,500	1914	Luke McLuke	M. Buxton	126	3,025
1873	Springbok	J. Rowe	110	5,200	1915	The Finn	G. Byrne	126	1,825
1874	Saxon	G. Bardee	110	4,200	1916	Friar Rock	E. Haynes	126	4,100
1875	Calvin	R. Swim	110	4,450	1917	Hourless	J. Butwell	126	5,800
1876	Algerine	W. Donohue	110	3,700	1918	Johren	F. Robinson	126	8,950
1877	Cloverbrook	C. Holloway	110	5,200	1919	Sir Barton	J. Loftus	126	11,950
1878	Duke of Magenta	L. Hughes	118	3,850	1920	Man o' War	C. Kummer	126	7,950
1879	Spendthrift	S. Evans	118	4,250	1921	Grey Lag	E. Sande	126	8,650
1880	Grenada	L. Hughes	118	2,800	1922	Pillory	C. H. Miller	126	39,200
1881	Saunterer	T. Costello	118	3,000	1923	Zev	E. Sande	126	38,000
1882	Forester	J. McLaughlin	118	2,600	1924	Mad Play	E. Sande	126	42,880
1883	George Kinney	J. McLaughlin	118	3,070	1925	American Flag	A. Johnson	126	38,500
1884	Panique	J. McLaughlin	118	3,150	1926	Crusader	A. Johnson	126	48,550
1885	Tyrant	P. Duffy	118	2,710	1927	Chance Shot	E. Sande	126	60,910
1886	Inspector B.	J. McLaughlin	118	2,720	1928	Vito	C. Kummer	126	63,430
1887	Hanover	J. McLaughlin	118	2,900	1929	Blue Larkspur	M. Garner	126	59,650
1888	Sir Dixon	J. McLaughlin	118	3,440	1930	Gallant Fox	E. Sande	126	66,040
1889	Eric	W. Hayward	118	4,960	1931	Twenty Grand	C. Kurtzinger	126	58,770
1890	Burlington	S. Barnes	118	8,560	1932	Faireno	T. Malley	126	55,120
1891	Foxford	E. Garrison	118 1/2	5,070	1933	Hurryhoff	M. Garner	126	49,490
1892	Patron	W. Hayward	122	6,610	1934	Peace Chance	W. D. Wright	126	43,410
1893	Comanche	W. Simms	117	5,310	1935	Omaha	W. Saunders	126	35,480
1894	Henry of Navarre	W. Simms	117	6,680	1936	Granville	J. Stout	126	29,800
1895	Belmar	F. Taral	119	2,700	1937	War Admiral	C. Kurtzinger	126	38,020
1896	Hastings	H. Griffin	122	3,025	1938	Pasteurized	J. Stout	126	34,530
1897	Scottish Chieftain	J. Scherrer	115	3,550	1939	Johnstown	J. Stout	126	37,020
1898	Bowling Brook	F. Littlefield	122	7,810	1940	Bimelech	F. A. Smith	126	35,030
1899	Jean Bereaud	R. Clawson	122	9,445	1941	Whirlaway	E. Arcaro	126	39,770
1900	Ildrim	N. Turner	126	14,790	1942	Shut Out	E. Arcaro	126	44,520
1901	Commando	H. Spencer	126	11,595	1943	Count Fleet	J. Longden	126	35,340
1902	Masterman	J. Bullman	126	13,220	1944	Bounding Home	G. L. Smith	126	55,000
1903	Africander	J. Bullman	126	12,285	1945	Pavot	E. Arcaro	126	52,675
1904	Delhi	G. Odum	126	11,575	1946	Assault	W. Mehrtens	126	75,400
1905	Tanya	E. Hildebrand	121	17,240	1947	Phalanx	R. Donoso	126	78,900
1906	Burgomaster	L. Lyne	126	22,700	1948	Citation	E. Arcaro	126	77,700

"TRIPLE CROWN" WINNERS IN THE UNITED STATES (Kentucky Derby, Preakness and Belmont Stakes)

Year	Horse	Owner	Year	Horse	Owner
1919	Sir Barton	J. K. L. Ross	1941	Whirlaway	Warren Wright
1930	Gallant Fox	William Woodward	1943	Count Fleet	Mrs. John Hertz
1935	Omaha	William Woodward	1946	Assault	Robert J. Kleberg
1937	War Admiral	Samuel D. Riddle	1948	Citation	Warren Wright

BROOKLYN HANDICAP

Aqueduct; 3-year-olds and over; 1 1/4 miles.

Run at Belmont Park in 1913 and at Gravesend prior to 1911. Distance 1 1/4 miles prior to 1915. Distance 1 1/2 miles from 1915 to 1939, inclusive.

Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
1887	Dry Monopole (4)	A. McCarthy	106	\$5,850	1919	Eternal (3)	A. Schuttlinger	105	4,850
1888	The Bard (5)	W. Hayward	125	6,925	1920	Cirrus (4)	L. Ensor	108	5,850
1889	Exile (7)	A. Hamilton	116	6,900	1921	Grey Lag (3)	L. Fator	112	7,600
1890	Castaway II. (4)	W. Bunn	100	6,900	1922	Exterminator (7)	A. Johnson	135	7,600
1891	Tenny (5)	Barnes	128	14,800	1923	Little Chief (4)	E. Sande	114	7,600
1892	Judge Morrow (5)	A. Covington	116	17,750	1924	Hephaistos (5)	J. Maiben	106	7,600
1893	Diablo (7)	F. Taral	112	17,750	1925	Mad Play (4)	L. Fator	123	7,600
1894	Dr. Rice (4)	F. Taral	112	17,750	1926	Single Foot (4)	C. Turner	110	11,950
1895	Hornpipe (4)	A. Hamilton	105	7,750	1927	Peanuts (5)	H. Thurber	112	13,150
1896	Sir Walter (6)	F. Taral	113	7,750	1928	Black Panther (4)	J. Maiben	105	13,750
1897	Howard Mann (4)	H. Martin	106	7,750	1929	Light Carbine (6)	G. Rose	97	14,300
1898	Ornament (4)	T. Sloan	127	7,800	1930	Sortie (5)	P. Walls	111	10,800
1899	Banastar (4)	D. Maher	110	7,800	1931	Questionnaire (4)	R. Workman	127	13,900
1900	Kinley Mack (4)	P. McCue	122	7,800	1932	Blenheim (4)	H. Mills	109	9,800
1901	Conroy (3)	W. O'Connor	102 1/2	7,800	1933	Dark Secret (4)	H. Mills	115	3,380
1902	Reina (4)	W. O'Connor	104	7,800	1934	Discovery (3)	J. Bejshak	113	2,925
1903	Irish Lad (3)	F. O'Neill	103	14,950	1935	Discovery (4)	J. Bejshak	123	10,200
1904	The Picket (4)	E. Helgesen	119	15,800	1936	Discovery (5)	L. Fallon	136	10,575
1905	Delhi (4)	T. Burns	124	15,800	1937	Seabiscuit (4)	J. Pollard	122	18,025
1906	Tokalon (5)	W. Bedell	108	15,800	1938	The Chief (3)	J. Longden	105	18,450
1907	Superman (3)	W. Miller	99	15,800	1939	Cravat (4)	B. James	126	18,250
1908	Celt (3)	J. Notter	106	19,750	1940	Isolater (7)	J. Stout	119	16,900
1909	King James (4)	E. Dugan	126	3,850	1941	Fenelon (4)	J. Stout	119	19,250
1910	Fitz Herbert (4)	E. Dugan	130	4,800	1942	Whirlaway (4)	G. Woolf	128	23,650
1913	Whisk Broom II (6)	J. Notter	130	3,125	1943	Devil Diver (4)	S. Brooks	123	23,200
1914	Buckhorn (5)	J. McCahey	113	3,350	1944	Four Freedoms (4)	E. Arcaro	116	39,720
1915	Tartar (5)	J. McTaggart	103	3,850	1945	Stymie (4)	R. Permane	116	39,120
1916	Friar Rock (3)	E. Haynes	108	3,850	1946	Gallorette (4)	J. Jessop	118	41,100
1917	Borrow (9)	W. Knapp	117	4,850	1947	Assault (4)	E. Arcaro	133	38,100
1918	Cudgel (4)	L. Lyke	129	4,850	1948	Conniver (4)	T. Atkinson	114	39,300

BUTLER HANDICAP

Empire City; 3-year-olds and over; 1 3/16 miles.

Distance 1 1/2 miles in 1935. Run at Jamaica from 1943 to 1948, inclusive.

Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
1935	Discovery (4)	J. Bejshak	132	\$11,675	1942	Tola Rose (5)	W. Mehrtens	103	22,800
1936	Good Gamble (4)	L. Fallon	119	9,975	1943	Thumbs Up (4)	O. Grohs	116	23,300
1937	Seabiscuit (4)	J. Pollard	126	18,025	1944	First Fiddle (5)	J. Longden	126	38,225
1938	Esposa (6)	N. Wall	114	19,400	1945	Stymie (4)	R. Permane	121	38,770
1939	Lovely Night (3)	N. Wall	104	16,950	1946	Lucky Draw (5)	H. Woodhouse	105	39,900
1940	Can't Wait (5)	B. James	111	21,000	1947	Assault (4)	E. Arcaro	135	36,700
1941	Foxbrough (5)	J. Stout	118	19,800	1948	(See page 872)			

CLASSIC STAKES

Arlington Park; 3-year-olds; 1 1/4 miles.

Run at Washington Park in 1943 and 1944.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1929	Blue Larkspur	M. Garner	126	\$59,900	1939	Challedon	H. Richards	126	35,600
1930	Gallant Fox	E. Sande	126	64,750	1940	Sirocco	G. Woolf	121	37,935
1931	Mate	A. Robertson	126	73,650	1941	Attention	C. Bierman	121	42,450
1932	Gusto	S. Coucci	126	76,600	1942	Shut Out	E. Arcaro	126	69,700
1933	Inlander	R. Jones	118	32,755	1943	Slide Rule	F. Zufelt	120	53,450
1934	Cavalcade	M. Garner	126	30,325	1944	Twilight Tear	L. Haas	114	62,050
1935	Omaha	W. D. Wright	126	28,975	1945	Pot o' Luck	D. Dodson	119	67,150
1936	Granville	J. Stout	126	28,400	1946	The Dude	M. Duhon	119	76,850
1937	Flying Scot	J. Gilbert	123	27,375	1947	But Why Not	W. Mehrtens	117	71,500
1938	Nedayr	W. D. Wright	121	27,500	1948	Papa Redbird	R. L. Baird	122	66,600

FRENCH STAKE WINNERS, 1948

GRAND PRIX DE PARIS—Aga Khan's and Leon Volterra's My Love

PRIX DU JOCKEY CLUB—C. Vandamme's Bey

PRIX DE L'ARC DE TRIOMPHE—Aga Khan's Migoli

PRIX DE DIANE—M. Boussac's Corteira

GRAND STEEPLCHASE DE PARIS—J. M. Sion's Rideo

EPSOM DERBY

Epsom Downs, England; 3-year-olds; 1 mile, 885 yards.

Distance one mile prior to 1784. Distance 1½ miles since 1939. Run at Newmarket from 1915 to 1918, inclusive, and from 1940 to 1945, inclusive, and called the New Derby Stakes.

Year	Owner	Winner	Win val.	Year	Owner	Winner	Win val.
'80	Sir C. Bunbury	Diomed	\$5,620	1847	Mr. Pedley	Cossack	26,500
'81	Mr. O'Kelly	Y. Eclipse	6,255	1848	Lord Clifton	Surplice	28,000
'82	Lord Egremont	Assassin	5,500	1849	Lord Eglington	T. Flying Dutchman	31,875
'83	Mr. Parker	Saltram	5,000	1850	Lord Zetland	Voltigeur	29,375
'84	Mr. O'Kelly	Sergeant	5,125	1851	Sir J. Hawley	Teddington	26,875
'85	Lord Clermont	Aimwell	4,375	1852	Mr. Bowes	Dan. O'Rourke	24,350
'86	Mr. Panton	Noble	5,000	1853	Mr. Bowes	W. Australian	26,500
'87	Lord Derby	Sir P. Teazle	4,500	1854	Mr. Gully	Andover	29,250
'88	Prince of Wales	Sir Thomas	4,625	1855	F. Popham	Wild Dayrell	24,125
'89	Duke of Bedford	Skyscraper	4,652	1856	Admiral Harcourt	Ellinton	28,125
'90	Lord Grosvenor	Rhadamanthus	4,750	1857	W. l'Anson	Blink Bonny	27,750
'91	Duke of Bedford	Eager	4,625	1858	Sir J. Hawley	Beadsman	26,615
'92	Lord Grosvenor	John Bull	4,875	1859	Sir J. Hawley	Musjid	33,250
'93	Sir F. Poole	Waxy	6,500	1860	Mr. Merry	Thormanby	30,500
'94	Lord Grosvenor	Daedalus	6,125	1861	Colonel Towneley	Kettledrum	30,500
'95	Sir F. Standish	Spread Eagle	6,500	1862	Mr. Snewing	Caractacus	32,125
'96	Sir F. Standish	Didelot	6,500	1863	R. C. Naylor	Macaroni	34,500
'97	Duke of Bedford	Colt, by Fidget	5,000	1864	W. l'Anson	Blair Athol	32,500
'98	Mr. Cookson	Sir Harry	5,375	1865	C't F. deLaGrange	Gladiator	34,375
'99	Sir F. Standish	Archduke	5,000	1866	R. Sutton	Lord Lyon	37,750
'00	Mr. Wilson	Champion	5,250	1867	Mr. Chaplin	Hermit	35,000
'01	Sir C. Bunbury	Eleanor	4,375	1868	Sir J. Hawley	Blue Gown	34,000
'02	Duke of Grafton	Tyrant	4,750	1869	J. Johnstone	Pretender	31,125
'03	Sir H. Williamson	Ditto	4,625	1870	Lord Falmouth	Kingcraft	38,875
'04	Lord Egremont	Hannibal	4,625	1871	B. Rothschild	Favonius	25,625
'05	Lord Egremont	Card. Beaufort	6,250	1872	H. Savile	Cremorne	24,250
'06	Lord Foley	Paris	5,875	1873	Mr. Merry	Doncaster	24,125
'07	Lord Egremont	Election	5,875	1874	W. S. Cartwright	Geo. Frederick	26,750
'08	Sir H. Williamson	Pan	5,500	1875	Prince Bathany	Galopin	24,750
'09	Duke of Grafton	Pope	6,375	1876	A. Baltazzi	Kisber	27,875
'10	Duke of Grafton	Whalebone	6,500	1877	Lord Falmouth	Silbio	30,250
'11	Sir J. Shelly	Phantom	7,500	1878	W. S. Crawford	Sefton	29,125
'12	Mr. Ladbroke	Octavius	7,125	1879	Mr. Acton	Sir Bevvs	35,125
'13	Sir C. Bunbury	Smolensko	7,375	1880	D. of Westminster	Bend Or	31,875
'14	Lord Stawell	Blucher	7,125	1881	P. Lorillard	Iroquois†	29,625
'15	Duke of Grafton	Whisker	7,500	1882	D. of Westminster	Shooter	23,875
'16	Duke of York	Prince Leopold	7,250	1883	Sir F. Johnstone	St. Blaise	25,750
'17	Mr. Payne	Azor	8,625	1884*	J. Hammond	St. Gatien	
'18	Mr. Thornhill	Sam	8,500		Sir J. Willoughby	Harvester	24,500
'19	Duke of Portland	Tiresias	8,250	1885	Lord Hastings	Melton	22,625
'20	Mr. Thornhill	Sailor	7,875	1886	D. of Westminster	Ormonde	23,500
'21	Mr. Hunter	Gustavus	7,875	1887	Mr. Abington	Mer. Hampton	22,625
'22	Duke of York	Moses	7,625	1888	Duke of Portland	Ayrshire	18,375
'23	Mr. Udny	Emilius	8,375	1889	Duke of Portland	Donovan	20,250
'24	Sir J. Shelley	Cedric	8,875	1890	Sir J. Miller	Sainfoin	29,700
'25	Lord Jersey	Middleton	9,000	1891	Sir F. Johnstone	Common	27,550
'26	Lord Egremont	Lap Dog	9,000	1892	Lord Bradford	Sir Hugo	34,900
'27	Lord Jersey	Mameluke	13,500	1893	Mr. McCalmont	Isinglass	27,575
'28	Duke of Rutland	Cadland	13,000	1894	Lord Rosebery	Ladas	27,250
'29	Mr. Gratwicke	Frederick	12,750	1895	Lord Rosebery	Sir Visto	27,250
'30	Mr. Chifney	Priam	13,500	1896	Prince of Wales	Persimmon	27,250
'31	Lord Lowther	Spaniel	15,500	1897	Mr. Gubbins	Galtee More	27,250
'32	Mr. Ridsdale	St. Giles	14,375	1898	J. Larnach	Jeddah	27,250
'33	Mr. Saddler	Dangerous	17,625	1899	D. of Westminster	Flying Fox	27,250
'34	Mr. Batson	Plenipotentiary	17,125	1900	Prince of Wales	Diamond Jubilee	27,250
'35	Mr. Bowes	Mundig	16,750	1901	W. C. Whitney	Volodyovskit	28,350
'36	Lord Jersey	Bay Middleton	18,125	1902	J. Gubbins	Ard Patrick	27,250
'37	Lord Berner	Phosphorus	14,000	1903	Sir J. Miller	Rock Sand	32,500
'38	Sir G. Heatcote	Amato	18,265	1904	L. de Rothschild	St. Amant	32,250
'39	Mr. W. Ridsdale	Bloomsbury	19,500	1905	Lord Rosebery	Cicero	32,250
'40	Mr. Robertson	Little Wonder	19,125	1906	Maj. E. Loder	Spearmint	32,250
'41	Mr. Rawlinson	Coronation	21,875	1907	R. Croker	Orby†	32,250
'42	Colonel Anson	Attila	24,500	1908	Chev. Ginistrelli	Signorinetta	32,250
'43	Mr. Bowes	Cotherstone	21,250	1909	King Edward	Minoru	32,250
'44	Colonel Peel	Orlando	21,750	1910	Mr. Fairie	Lemberg	32,250
'45	Mr. Gratwick	Merry Monarch	20,000	1911	J. B. Joel	Sunstar	32,250
'46	Mr. Gully	Pyrrhus the First	26,500				

*Dead heat; stake divided. †American bred or owned.

Epsom Derby—(cont.)

Year	Owner	Winner	Win val.	Year	Owner	Winner	Win val.
1912	W. Raphael	Tagalie	32,250	1931	J. A. Dewar	Cameronian	48,640
1913	A. P. Cunliffe	Aboyeur	32,250	1932	T. Walls	April the Fifth	34,056
1914	H. B. Duryea	Durbar II	32,250	1933	Lord Derby	Hyperion	49,182
1915	S. Joel	Pommern	12,000	1934	H. H. M. of Raj'pla	Windsor Lad	46,760
1916	E. Hulton	Finella	14,500	1935	H. H. Aga Khan	Bahram	46,080
1917	Mr. Fairie	Gay Crusader	10,250	1936	H. H. Aga Kahn	Mahmoud	49,670
1918	Lady Jas. Douglas	Gainsborough	20,000	1937	Mrs. G. B. Miller	Mid-Day Sun	47,205
1919	Lord Glanely	Grand Parade	32,250	1938	P. Beatty	Bois Roussel	43,644
1920	Maj. G. Loder	Spion Kop	32,250	1939	Lord Rosebery	Blue Peter	42,680
1921	J. B. Joel	Humorist	32,250	1940	F. Darling	Pont l'Eveque	23,303
1922	Lord Woolavington	Captain Cuttle	51,250	1941	Mrs. M'D'ald-Buc'n	Owen Tudor	18,003
1923	Ben Irish	Papyrus	56,800	1942	Lord Derby	Watling Street	15,530
1924	Lord Derby	Sansovino	59,025	1943	Miss Dorothy Paget	Straight Lead	17,552
1925	H. E. Morris	Manna	55,475	1944	Lord Rosebery	Ocean Swell	23,604
1926	Lord Woolavington	Coronach	51,750	1945	Sir Eric Ohlson	Dante	33,356
1927	Frank Curzon	Call Boy	63,075	1946	J. E. Ferguson	Airborne	38,662
1928	Sir H. C'iffie-Owen	Felstead	58,025	1947	B. G. de Waldner	Pearl Diver	38,788
1929	W. Barnett	Trigo	59,825	1948	H. H. Aga Khan	My Love	49,736
1930	H. H. Aga Khan	Blenheim	50,180		Leon Volterra		

†American bred or owned.

FUTURITY STAKES

Belmont Park; 2-year-olds; 6½ furlongs

Distance 1,263 yards 1 foot from 1892 to 1901, inclusive. Distance 3/4 mile prior to 1892 and from 1902 to 1924, inclusive; about 7/8 mile from 1925 to 1933, inclusive. Run at Sheephead Bay until 1910. Run at Saratoga by special arrangement in 1910, 1913 and 1914.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1888	Proctor Knott	S. Barnes	112	\$40,900	1920	Stee Lightly	F. Keogh	116	35,870
1889	Chaos	G. Day	109	54,500	1921	Bunting	F. Colletti	117	39,700
1890	Potomac	A. Hamilton	115	67,675	1922	Sally's Alley	A. Johnson	116	47,550
1891	His Highness	J. McLaughlin	130	61,675	1923	St. James	T. McTaggart	130	64,810
1892	Morello	W. Hayward	118	40,450	1924	Mother Goose	L. McAttee	114	65,730
1893	Domino	F. Taral	130	48,855	1925	Pompey	L. Fator	127	58,480
1894	The Butterflies	H. Griffin	112	48,710	1926	Scapa Flow	L. Fator	122	65,980
1895	Requital	H. Griffin	115	53,190	1927	Anita Peabody	C. Lang	124	91,790
1896	Ogden	F. Turbiville	115	43,790	1928	High Strung	L. McAttee	122	97,990
1897	L'Alouette	R. Clawson	115	34,290	1929	Whichone	R. Workman	125	105,730
1898	Martimas	H. Lewis	118	36,610	1930	Jamestown	L. McAttee	130	99,600
1899	Chacornac	H. Spencer	114	30,630	1931	Top Flight	R. Workman	127	94,780
1900	Ballyhoo Bey	T. Sloan	112	33,580	1932	Kerry Patch	P. Walls	122	88,690
1901	Yankee	W. O'Connor	119	36,850	1933	Singing Wood	R. Jones	122	81,700
1902	Savable	L. Lyne	119	44,500	1934	Chance Sun	W. D. Wright	122	77,510
1903	Hamburg Belle	G. Fuller	114	36,600	1935	Tintagel	S. Coucci	122	66,450
1904	Artful	E. Hildebrand	114	40,830	1936	Pompoon	H. Richards	127	55,630
1905	Ormondale	A. Redfern	117	32,960	1937	Menow	C. Kurtzinger	119	56,800
1906	Electioneer	W. Shaw	117	36,880	1938	Porter's Mite	B. James	119	57,045
1907	Colin	W. Miller	125	26,640	1939	Bimelech	F. A. Smith	126	57,710
1908	Maskette	J. Notter	118	26,110	1940	Our Boots	E. Arcaro	119	65,800
1909	Sweep	J. Butwell	126	24,100	1941	Some Chance	W. Eads	122	57,900
1910	Novelty	C. H. Shilling	127	25,360	1942	Occupation	G. Woolf	126	57,890
1913	Pennant	C. Borel	119	15,060	1943	Occupy	G. Woolf	126	55,635
1914	Trojan	C. Burlingame	117	16,010	1944	Pavot	G. Woolf	126	53,890
1915	Thunderer	J. Notter	122	16,590	1945	Star Pilot	A. Kirkland	126	52,940
1916	Campfire	J. McTaggart	125	17,340	1946	First Flight	E. Arcaro	123	73,350
1917	Papp	L. Allen	127	15,600	1947	Citation	A. Snider	122	78,430
1918	Dunboyne	A. Schuttinger	127	23,360	1948	Blue Peter	E. Guerin	126	88,410
1919	Man o' War	J. Loftus	127	26,650					

GALLANT FOX HANDICAP

Jamaica; 3-year-olds and over; 1 3/16 miles.

Distance 1½ miles prior to 1948.

Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
1939	Isolator (6)	J. Stout	119	\$ 8,400	1944	Some Chance (5)	A. Snider	116	37,565
1940	Salamina (3)	D. Meade	107	11,150	1945	Reply Paid (3)	H. Lindberg	108	39,105
1941	Market Wise (3)	W. Eads	119	11,550	1946	Stymie (5)	B. James	126	59,050
1942	Dark Discovery (4)	W. Mehrtens	100	11,300	1947	Stymie (6)	C. McCreary	125	56,350
1943	Eurasian (3)	H. Lindberg	116	19,700	1948	Faultless (4)	H. Woodhouse	118	60,300

GRAND NATIONAL STEEPLECHASE

Belmont Park; 4-year-olds and over; about 3 miles.

Run at Morris Park prior to 1905. Distance about 2½ miles prior to 1916.

Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
1899	Trillion (8)	Mr. W. C. Hayes	163	\$ 6,150	1925	Moseley (5)	C. Smoot	138	6,350
1900	Philaie (5)	Donahue	153	6,525	1926	Erne II (5)	R. H. Crawford	149	6,550
1901	Sackett (6)	Carson	137	6,100	1927	Jolly Roger (5)	R. H. Crawford	165	34,750
1902	Geo. W. Jenkins (4)	Ray	133	5,525	1928	Jolly Roger (6)	R. H. Crawford	167	35,850
1903	Plohn (6)	Ray	141	6,050	1929	Arc Light (5)	A. Bauman	151	34,450
1904	St. Jude (4)	Ray	142	5,450	1930	Tourist II (5)	W. Hunt	148	28,350
1905	Mackey Dwyer (5)	Holman	149	5,210	1931	Green Cheese (4)	Mr. R. McKinney	140	28,250
1906	Good and Plenty (6)	Ray	170	5,675	1932	Tourist II (7)	G. Cooper	158	8,200
1907	Alfar (5)	Owens	143	5,500	1933	Best Play (4)	A. Bauman	132	4,850
1908	Kara (5)	McAfee	138	4,775	1934	Battleship (7)	Mr. C. K. Bassett	147	5,900
1909	Sir Wooster (5)	Davidson	155	740	1935	Snap Back (6)	W. N. Ball	137	6,050
1910	Rossfonton (4)	W. Allen	138	1,275	1936	Bushranger (6)	H. Little	172	5,750
1913	Penobscot (4)	Wolke	140	1,845	1937	Sailor Bowers (5)	H. Little	153	9,200
1914	Reluff (7)	T. Tuckey	157	1,650	1938	Annibal (5)	Mr. R. McKinney	156	8,100
1915	Mission (6)	B. Haynes	148	1,785	1939	Whaddon Chase (4)	J. Penrod	146	9,300
1916	Hibler (7)	T. Parrette	140	1,860	1940	Cottesmore (5)	F. Slate	160	14,850
1917	Expectation (6)	B. Haynes	144	1,895	1941	Speculate (5)	T. Roby	142	14,350
1918	St. Charlotte (6)	C. Smoot	158	1,755	1942	Cottesmore (7)	F. Slate	155	13,950
1919	Stonewall (7)	V. Powers	148	2,150	1943	Brother Jones (7)	G. Walker	150	14,500
1920	Square Dealer (6)	V. Powers	154	2,075	1944	Burma Road (5)	J. Magee	136	13,385
1921	Earlocker (5)	W. Mahoney	142	3,675	1945	Mercator (6)	W. Owen	142	15,005
1922	Lytle (8)	R. H. Crawford	136	3,575	1946	Elkridge (8)	E. Roberts	151	21,425
1923	Sea Tale (7)	J. Pierce	158	3,675	1947	Adaptable (6)	J. Rich	147	20,700
1924	Dan IV (6)	N. Kennedy	158	4,100	1948	American Way (6)	D. Marzani	144	22,350

GRAND NATIONAL STEEPLECHASE

Liverpool, England; 6-year-olds and over; 4 miles, 856 yards (Aintree Course)

Year	Owner	Winner	Starters	Value	Year	Owner	Winner	Starters	Value
1899	J. Elmore	Lottery	17		1878	J. Nightingall	Shifnal	12	8,450
1900	Mr. Villebois	Jerry	12		1879	G. Moore	The Liberator	18	9,500
1901	Lord Craven	Charity	11		1880	P. Ducrot	Empress	14	6,250
1902	J. Elmore	Gaylad	15		1881	Capt. Kirkwood	Woodbrook	13	4,900
1903	Lord Chesterfield	Vanguard	16		1882	Lord Manners	Seaman	12	6,675
1904	Mr. Quartermaine	Pioneer	22		1883	Prince C. Kinsky	Zoedone	10	4,625
1905	W. S. Crawford	Cure All	15		1884	H. F. Boyd	Voluptuary	15	5,175
1906	Mr. Adams	Pioneer	22		1885	A. Cooper	Roquefort	19	5,175
1907	Mr. Courtenay	Matthew	26		1886	Mr. Douglas	Old Joe	23	6,805
1908	Capt. Little	Chandler	30		1887	E. Jay	Gamecock	16	6,080
1909	Mr. S. Mason, Jr.	Peter Simple	34	\$4,025	1888	Col. E. W. Baird	Playfair	20	5,905
1910	Mr. Osborne	Abd el Kader	32		1889	M. A. Maher	Frigate	20	6,170
1911	Mr. Osborne	Abd el Kader	21		1890	G. Masterman	Ilex	16	8,325
1912	T. F. Mason	Miss Mowbray	24	3,400	1891	W. G. Jameson	Come Away	21	8,400
1913	Capt. Little	Peter Simple	21		1892	C. G. Wilson	Father O'Flynn	25	8,400
1914	Mr. Moseley	Bourton			1893	C. G. Duff	Cloister	15	9,825
1915	Mr. Dennis	Wanderer	20		1894	Capt. C. H. Fenwick	Why Not	14	9,875
1916	W. Barnett	Freetrader	21		1895	J. Widger	W. M. f. Borneo	19	9,875
1917	G. Hodgman	Emigrant	28	5,575	1896	Lord Wavertree	The Soarer	28	9,875
1918	C. Capel	Little Charley	16		1897	H. M. Dyas	Manifesto	28	9,875
1919	Mr. Willoughby	Half Caste	20	4,200	1898	C. G. Adams	Drogheda	25	9,875
1920	C. Capel	Anatis	19		1899	J. G. Bulteel	Manifesto	19	9,875
1921	J. Bennett	Jealousy	24	4,925	1900	Prince of Wales	Ambush II	16	9,875
1922	Visc't de Namur	Huntsman	13		1901	B. Bletsoe	Grudon	24	9,875
1923	Lord Coventry	Emblem	16	4,275	1902	A. Gorham	Shannon Lass	21	10,000
1924	Lord Coventry	Emblematic	25		1903	J. S. Morrison	Drumcree	23	10,000
1925	B. J. Angell	Alciabide	23	5,175	1904	G. H. Gollan	Moifaa	26	10,000
1926	Mr. Studd	Salamander	30		1905	F. Bibby	Kirkland	27	10,125
1927	Duke of Hamilton	Cortolvin	23	8,300	1906	Prince Hatzfeldt	Asceit's Silver	23	10,875
1928	Lord Poulett	The Lamb	21	7,850	1907	S. Howard	Eremon	23	12,000
1929	Mr. Weyman	The Colonel	22	8,800	1908	Maj. F. Douglas-Pennant	Rubio*	24	12,000
1930	M. Evans	The Colonel	23	7,325	1909	J. Hennessy	Lutteur III	32	12,000
1931	Lord Poulett	The Lamb	25	8,325	1910	S. Howard	Jenkinson	25	12,000
1932	E. Brayley	Casse Tete	25	7,275	1911	F. Bibby	Glenside	26	12,500
1933	Capt. Macchell	Disturbance	22	9,450	1912	Mr. C. G. Assheton-Smith	Jerry M.	24	16,000
1934	Capt. Macchell	Reugny	28	9,700	1913	Sir C. G. Assheton-Smith	Covertcoat	22	15,850
1935	H. Bird	Pathfinder	18						
1936	Capt. Macchell	Regal	19	7,550					
1937	F. G. Hobson	Austerlitz	16	6,450					

*American bred or owned.

Grand National Steeplechase—(cont.)

Year	Owner	Winner	Starters	Value	Year	Owner	Winner	Starters	Value
1914	T. Tyler	Sunloch	20	17,575	1929	Mrs. M. A. G'm'll	Gregalach	66	64,62
1915	Lady Nelson	Ally Sloper	20	17,575	1930	W. Midwood	Shaun Goilin	41	48,65
1916*	P. F. Heybourn	Bermouth	21	5,750	1931	C. R. Taylor	Grakle	36	37,24
1917*	Sir G. Bullough	Ballymacad	19	6,025	1932	W. Parsonage	Forbra	36	28,57
1918*	Mrs. H. Peel	Poethlyn	17	4,925	1933	Mrs. F. A. Clark	Kellsboro Jackf	34	36,72
1919*	Mrs. H. Peel	Poethlyn	22	17,950	1934	Miss D. Paget	Golden Miller	30	36,32
1920	Major Gerrard	Troytown	24	21,800	1935	Maj. Noel F'rlong	Reynoldstown	27	32,72
1921	T. McAlpine	Shaun Spadah	35	39,925	1936	Maj. Noel F'rlong	Reynoldstown	35	35,10
1922	Hugh Kershaw	Music Hall	32	35,000	1937	H. Lloyd Thomas	Royal Mail	33	32,22
1923	Stephen Sanford	Sgt. Murphy†	28	36,100	1938	Mrs. M. Scott	Battleship†	36	37,54
1924	Lord Airlie	Master Rob't	30	40,825	1939	Sir A. Maguire	Workman	37	31,96
1925	Major D. Gould	Double Chance	33	40,600	1940	Lord Stalbridge	Bogskar	30	16,88
1926	C. Schwartz	Jack Horner	30	31,550	1946	John Morant	Lovely Cottage	34	35,30
1927	Mrs. M. Partridge	Sprig	37	41,075	1947	J. J. McDowell	Caughoo	57	39,72
1928	H. S. Kenyon	Tipperary Tim	42	55,900	1948	John Proctor	Sheila's Cottage	43	36,47

*Substitute race. †American bred or owned.

HOLLYWOOD GOLD CUP

Hollywood Park; 3-year-olds and over; 1¼ miles.

Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
1938	Seabiscuit (5)	G. Woolf	133	\$37,150	1945	Challenge Me (4)	A. Skoronski	108	48,23
1939	Kayak II (4)	G. Woolf	125	35,075	1946	Triplegate (5)	B. James	113	79,90
1940	Challdon (4)	G. Woolf	133	36,200	1947	Cover Up (4)	R. Permane	117	73,50
1941	Big Pebble (5)	J. Westrope	119	62,475	1948	Shannon II (7)	J. Adams	116	67,60
1944	Happy Issue (4)	H. Woodhouse	119	60,600					

HOPEFUL STAKES

Saratoga; 2-year-olds; 6½ furlongs.

Distance 3/4 mile prior to 1925; run at Belmont Park 1943 to 1945, inclusive.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1903	Delhi	C. Gannon	112	\$22,275	1927	Brooms	J. Maiben	115	55,75
1904	Tanya	E. Hildebrand	127	29,790	1928	Jack High	G. Ellis	127	54,10
1905	Mohawk II	A. Redfern	130	16,490	1929	Boojum	R. Workman	117	54,75
1906	Peter Pan	W. Knapp	130	17,640	1930	Epithet	W. Kelsay	117	55,00
1907	Jim Gaffney	D. Nicol	115	17,500	1931	Tick On	P. Walls	117	45,95
1908	Helmet	J. Notter	115	10,990	1932	Ladysman	R. Jones	130	41,40
1909	Rocky O'Brien	V. Powers	122	17,160	1933	Bazaar	D. Meade	119	33,55
1910	Novelty	A. Thomas	130	19,140	1934	Psychic Bid	M. Garner	122	24,25
1913	Bringhurst	J. Loftus	113	4,100	1935	Red Rain	R. Workman	124	38,40
1914	Regret	J. Notter	127	9,590	1936	Maedic	E. Litzenberger	122	32,60
1915	Dominant	J. Notter	130	9,150	1937	Sky Larking	A. Robertson	119	31,45
1916	Campfire	J. McTaggart	130	18,850	1938	El Chico	N. Wall	126	42,55
1917	Sun Briar	W. Knapp	130	30,600	1939	Bimelech	F. A. Smith	122	33,75
1918	Eternal	A. Schuttinger	115	30,150	1940	Whirlaway	J. Longden	122	37,85
1919	Man o' War	J. Loftus	130	24,600	1941	Devil Diver	J. Skelly	119	35,95
1920	Leonardo II	A. Schuttinger	115	33,850	1942	Devil's Thumb	C. McCreary	122	31,75
1921	Morvich	A. Johnson	130	34,900	1943	Bee Mac	S. Young	119	33,30
1922	Dunlin	C. Kummer	115	38,950	1944	Pavot	G. Woolf	126	51,77
1923	Diogenes	C. Ponce	115	46,800	1945	Star Pilot	A. Kirkland	112	55,19
1924	Master Charlie	G. Babin	130	48,700	1946	Blue Border	A. DeLara	122	46,45
1925	Pompey	L. Fator	127	42,850	1947	Relic	J. Adams	114	48,20
1926	Lord Chaucer	F. Coltilletti	115	48,850	1948	Blue Peter	E. Guerin	126	47,75

New York Wagering, Attendance Records

Type of record	Track	Date	Amount
Mutuel handle (8 races)	Belmont	Sept. 22, 1945	\$5,016,74
Mutuel handle (7 races)	Jamaica*	Nov. 3, 1945	4,330,47
Mutuel handle (1 race)	Belmont	Sept. 27, 1945	763,12
Daily double	Jamaica	Oct. 30, 1945	251,68
Attendance	Jamaica	May 30, 1945	64,67

*Empire City meeting.

KENTUCKY DERBY

Churchill Downs; 3-year-olds; 1 1/4 miles

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1905	Aristides	O. Lewis	100	\$2,850	1912	Worth	C. H. Shilling	117	4,850
1906	Vagrant	R. Swim	97	2,950	1913	Donerail	R. Goose	117	5,475
1907	Baden Baden	W. Walker	100	3,300	1914	Old Rosebud	J. McCabe	114	9,125
1908	Day Star	J. Carter	100	4,050	1915	Regret	J. Notter	112	11,450
1909	Lord Murphy	C. Schauer	100	3,550	1916	George Smith	J. Loftus	117	9,750
1910	Fonso	G. Lewis	105	3,800	1917	Omar Khayyam	C. Borel	117	16,600
1911	Hindoo	J. McLaughlin	105	4,410	1918	Exterminator	W. Knapp	114	14,700
1912	Apollo	B. Hurd	102	4,560	1919	Sir Barton	J. Loftus	112 1/2	20,825
1913	Leonatus	W. Donohue	105	3,760	1920	Paul Jones	T. Rice	126	30,375
1914	Buchanan	I. Murphy	110	3,990	1921	Behave Yourself	C. Thompson	126	38,450
1915	Joe Cotton	E. Henderson	110	4,630	1922	Morvich	A. Johnson	126	46,775
1916	Ben Ali	P. Duffy	118	4,890	1923	Zev	E. Sande	126	53,600
1917	Montrose	I. Lewis	118	4,200	1924	Black Gold	J. D. Mooney	126	52,775
1918	Macbeth II	G. Covington	115	4,740	1925	Flying Ebony	E. Sande	126	52,950
1919	Spokane	T. Kiley	118	4,970	1926	Bubbling Over	A. Johnson	126	50,075
1920	Riley	I. Murphy	118	5,460	1927	Whiskery	L. McAtee	126	51,000
1921	Kingman	I. Murphy	122	4,680	1928	Reigh Count	C. Lang	126	55,375
1922	Azra	A. Clayton	122	4,230	1929	Clyde Van Dusen	L. McAtee	126	53,950
1923	Lookout	E. Kunze	122	4,090	1930	Gallant Fox	E. Sande	126	50,725
1924	Chant	F. Goodale	122	4,020	1931	Twenty Grand	C. Kurtzinger	126	48,725
1925	Halma	J. Perkins	122	2,970	1932	Burgoo King	E. James	126	52,350
1926	Ben Brush	W. Simms	117	4,850	1933	Brokers Tip	D. Meade	126	48,925
1927	Typhoon II	F. Garner	117	4,850	1934	Cavalcade	M. Garner	126	28,175
1928	Plaudit	W. Simms	117	4,850	1935	Omaha	W. Saunders	126	39,525
1929	Manuel	F. Taral	117	4,850	1936	Bold Venture	I. Hanford	126	37,725
1930	Lieut. Gibson	J. Boland	117	4,850	1937	War Admiral	C. Kurtzinger	126	52,050
1931	His Eminence	J. Winkfield	117	4,850	1938	Lawrin	E. Arcaro	126	47,050
1932	Alan-a-Dale	J. Winkfield	117	4,850	1939	Johnstown	J. Stout	126	46,350
1933	Judge Himes	H. Booker	117	4,850	1940	Gallahadion	C. Bierman	126	60,150
1934	Elwood	F. Prior	117	4,850	1941	Whirlaway	E. Arcaro	126	61,275
1935	Agile	J. Martin	122	4,850	1942	Shut Out	W. D. Wright	126	64,225
1936	Sir Huon	R. Troxler	117	4,850	1943	Count Fleet	J. Longden	126	60,725
1937	Pink Star	A. Minder	117	4,850	1944	Pensive	C. McCreary	126	64,675
1938	Stone Street	A. Pickens	117	4,850	1945	Hoop Jr.	E. Arcaro	126	64,850
1939	Wintergreen	V. Powers	117	4,850	1946	Assault	W. Mehrtens	126	96,400
1940	Donau	F. Herbert	117	4,850	1947	Jet Pilot	E. Guerin	126	92,160
1941	Meridian	G. Archibald	117	4,850	1948	Citation	E. Arcaro	126	83,400

MASSACHUSETTS HANDICAP

Suffolk Downs; 3-year-olds and over; 1 1/4 miles.

Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
1935	Top Row (4)	G. Woolf	116	\$18,750	1942	Whirlaway (4)	G. Woolf	130	43,850
1936	Time Supply (5)	R. Workman	121	23,500	1943	Market Wise (5)	V. Nodarse	126	39,650
1937	Seabiscuit (4)	J. Pollard	130	51,780	1944	First Fiddle (5)	J. Longden	124	41,850
1938	Menow (3)	N. Wall	107	40,550	1945	First Fiddle (6)	J. Longden	121	42,750
1939	Fighting Fox (4)	J. Stout	113	49,250	1946	Pavot (4)	A. Kirkland	120	47,750
1940	Eight Thirty (4)	H. Richards	126	46,550	1947	Stymie (5)	C. McCreary	128	41,150
1941	War Relic (3)	T. Atkinson	102	48,350	1948	Beauchef (5)	R. Donoso	115	47,250

NARRAGANSETT SPECIAL

Narragansett Park; 3-year-olds and over; 1 3/16 miles.

Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
1934	Time Supply (3)	T. Luther	120	\$28,000	1941	War Relic (3)	T. Atkinson	107	22,400
1935	Top Row (4)	W. D. Wright	110	25,700	1942	Whirlaway (4)	G. Woolf	130	24,300
1936	Rosemont (4)	H. Richards	121	32,100	1943	Market Wise (5)	J. Longden	124	25,300
1937	Calumet Dick (5)	H. Dabson	115	28,200	1944	Paperboy (6)	W. Mehrtens	110	23,150
1938	Stageland (3)	J. Westrope	119	26,300	1945	Westminster (4)	W. Garner	110	20,400
1939	Challedon (3)	H. Richards	118	24,600	1946	Lucky Draw (5)	C. McCreary	123	27,950
1940	Hash (4)	E. Arcaro	122	24,600	1948	Donor (4)	A. Kirkland	105	20,750

PIMLICO SPECIAL

Pimlico; 3-year-olds and over; 1 3/16 miles.

Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
1937	War Admiral	C. Kurtzinger	128	\$ 5,680	1943	Shut Out (4)	E. Arcaro	126	25,000
1938	Seabiscuit (5)	G. Woolf	120	15,000	1944	Thwarting Tear (3)	D. Dodson	117	25,000
1939	Challedon (3)	E. Arcaro	120	10,000	1945	Armed (4)	D. Dodson	126	25,000
1940	Challedon (4)	G. Woolf	126	10,000	1946	Assault (3)	E. Arcaro	120	25,000
1941	Market Wise (3)	W. Eads	120	10,000	1947	Fervent (3)	A. Snider	120	25,000
1942*	Whirlaway (4)	G. Woolf	126	10,000	1948*	Citation (3)	E. Arcaro	120	10,000

*Walkover.

PIMLICO FUTURITY**Pimlico; 2-year-olds; 1 1/16 miles.**

Run in two divisions in 1922. Distance 1 mile prior to 1929.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1921	Morvich	A. Johnson	122	\$42,750	1936	Matey	H. Richards	119	25,30
1922	Blossom Time	A. Johnson	119	41,015	1937	Nedayr	W. D. Wright	122	28,14
1922	Sally's Alley	A. Johnson	116	41,015	1938	Challedon	G. Seabo	119	28,77
1923	Beau Butler	G. W. Carroll	122	54,030	1939	Bimelech	F. A. Smith	122	33,23
1924	Stimulus	H. Thurber	122	49,220	1940	Bold Irishman	J. Gilbert	122	33,33
1925	Canter	C. Turner	117	53,350	1941	Contradiction	K. McCombs	122	33,33
1926	Fair Star	O. Bourassa	119	59,660	1942	Count Fleet	J. Longden	119	30,82
1927	Glade	L. Morris	114	53,310	1943	Platter	C. McCreary	119	33,44
1928	High Strung	L. McAtee	122	50,750	1944	Pot o' Luck	D. Dodson	122	35,13
1929	Flying Heels	W. Kelsay	117	55,810	1945	Star Pilot	A. Kirkland	122	36,36
1930	Equipoise	R. Workman	119	50,360	1946	Jet Pilot	J. Gilbert	122	37,61
1931	Top Flight	R. Workman	119	56,170	1947	Citation	D. Dodson	119	36,67
1932	Swivel	J. Gilbert	116	62,430	1948	Capot	T. Atkinson	119	47,32
1935	Hollywood	S. Coucel	122	45,850					

PREAKNESS STAKES**Pimlico; 3-year-olds; 1 3/16 miles**

Distance 1½ miles prior to 1889; 1¼ miles in 1889; 1 1/16 miles 1894 to 1900, inclusive, and 1908; 1 mile and 70 yards from 1901 to 1907, inclusive; 1 mile in 1909 and 1910; 1¼ miles from 1911 to 1924, inclusive. Run at Brooklyn Jockey Club's Gravesend Course from 1894 to 1908, inclusive. Run in two divisions in 1918.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1873	Survivor	G. Barbee	110		1914	Holiday	A. Schuttinger	108	1,35
1874	Culpepper	M. Donohue	110		1915	Rhine Maiden	D. Hoffman	104	1,27
1875	Tom Ochiltree	L. Hughes	110		1916	Damrosch	L. McAtee	115	1,38
1876	Shirley	G. Barbee	110		1917	Kalitan	E. Haynes	116	4,80
1877	Cloverbrook	C. Holloway	110		1918	War Cloud	J. Loftus	117	12,25
1878	Duke of Magenta	C. Holloway	110		1918	Jack Har Jr	C. Peak	115	11,25
1879	Harold	W. Hughes	110	\$2,550	1919	Sir Barton	J. Loftus	126	24,50
1880	Grenada	W. Hughes	110	2,000	1920	Man o' War	C. Kummer	126	23,00
1881	Saunterer	W. Costello	110	1,950	1921	Broomspun	F. Coltietti	114	43,00
1882	Vanguard	W. Costello	110	1,250	1922	Pillory	L. Morris	114	51,00
1883	Jacobus	G. Barbee	110	1,635	1923	Vigil	B. Marinelli	114	52,00
1884	Knight of Ellerslie	S. H. Fisher	110	1,905	1924	Nellie Morse	J. Merimee	121	54,00
1885	Tecumseh	J. McLaughlin	118	2,160	1925	Coventry	C. Kummer	126	52,70
1886	The Bard	S. H. Fisher	118	2,050	1926	Display	J. Maiben	126	53,62
1887	Dunboyne	W. Donohue	118	1,675	1927	Bostonian	A. Abel	126	53,10
1888	Refund	F. Littlefield	118	1,185	1928	Victorian	R. Workman	126	60,00
1889	Buddhist	H. Anderson	118	1,130	1929	Dr. Freeland	L. Schaefer	126	52,32
1894	Assignee	Taral	122	1,830	1930	Gallant Fox	E. Sande	126	51,92
1895	Belmar	Taral	115	1,350	1931	Mate	G. Ellis	126	48,22
1896	Margrave	Griffin	115	1,350	1932	Burgoo King	E. James	126	50,37
1897	Paul Kauvar	Thorpe	108	1,420	1933	Head Play	C. Kurlinger	126	26,85
1898	Sly Fox	Simms	120	1,450	1934	High Quest	R. Jones	126	25,17
1899	Half Time	Clawson	104	1,580	1935	Omaha	W. Saunders	126	25,32
1900	Hindus	Spencer	106	1,900	1936	Bold Venture	G. Woolf	126	27,32
1901	The Parader	Landry	118	1,605	1937	War Admiral	C. Kurlinger	126	45,60
1902	Old England	L. Jackson	115	2,240	1938	Dauber	M. Peters	126	51,87
1903	Flocarine	Gannon	113	1,875	1939	Challedon	G. Seabo	126	53,71
1904	Bryn Mawr	Hildebrand	108	2,355	1940	Bimelech	F. A. Smith	126	53,23
1905	Cairngorm	W. Davis	114	2,145	1941	Whirlaway	E. Arcaro	126	49,36
1906	Whimsical	Miller	108	2,355	1942	Alsab	B. James	126	58,17
1907	Don Enrique	Mountain	107	2,260	1943	Count Fleet	J. Longden	126	43,19
1908	Royal Tourist	E. Dugan	112	2,455	1944	Pensive	C. McCreary	126	60,07
1909	Effendi	W. Doyle	116	3,225	1945	Polynesian	W. D. Wright	126	66,17
1910	Layminster	R. Estep	84	3,300	1946	Assault	W. Mehrtens	126	96,62
1911	Watervale	E. Dugan	112	2,700	1947	Faultless	D. Dodson	126	98,09
1912	Colonel Holloway	C. Turner	107	1,450	1948	Citation	E. Arcaro	126	91,87
1913	Buskin	J. Butwell	117	1,670					

SANTA ANITA DERBY**Santa Anita Park; 3-year-olds; 1½ miles**

Distance 1¼ miles prior to 1938.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1935	Gille	S. Coucel	126	\$19,650	1941	Porter's Cap	L. Haas	120	44,97
1936	He Did	W. D. Wright	126	26,000	1945	Byeabond	G. Woolf	119	37,25
1937	Fairy Hill	M. Peters	121	45,425	1946	Knockdown	R. Pernane	122	74,68
1938	Stagehand	J. Westrope	118	42,350	1947	On Trust	J. Longden	118	81,75
1939	Ciencia	C. Bierman	115	41,850	1948	Salmagundi	J. Longden	118	79,80
1940	Sweepida	R. Neves	120	43,850					

SANTA ANITA HANDICAP

Santa Anita Park; 3-year-olds and over; 1 1/4 miles

Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
35	Azucar (7).....	G. Woolf.....	117	\$108,400	1941	Bay View (4).....	N. Wall.....	108	\$89,360
36	Top Row (5).....	W. D. Wright.....	116	104,600	1945	Thumbs Up (6).....	J. Longden.....	130	82,925
37	Rosemont (5).....	H. Richards.....	124	90,700	1946	War Knight (6).....	J. Adams.....	115	101,220
38	Stagehand (3).....	N. Wall.....	100	91,450	1947	Olhaverly (8).....	M. Peterson.....	116	98,900
39	Kayak II (4).....	J. Adams.....	110	91,100	1948	Talon (5).....	E. Arcaro.....	122	102,500
40	Seabiscuit (7).....	J. Pollard.....	130	86,650					

SUBURBAN HANDICAP

Belmont Park; 3-year-olds and over; 1 1/4 miles.

Run at Sheephead Bay prior to 1913.

Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
384	Gen. Monroe (6).....	W. Donohue.....	124	\$4,945	1918	Johren (3).....	F. Robinson.....	110	\$5,850
385	Pontiac (4).....	H. Olney.....	102	5,855	1919	Corn Tassel (5).....	L. Ensor.....	108	5,200
386	Troubadour (4).....	W. Fitzpatrick.....	115	5,697	1920	Paul Jones (3).....	A. Schuttinger.....	106	6,350
387	Eurus (4).....	G. Davis.....	102	6,065	1921	Audacious (5).....	C. Kummer.....	120	8,100
388	Elkwood (5).....	W. Martin.....	119	6,812	1922	Captain Alcock (5).....	C. Ponce.....	108	8,200
389	Raceland (4).....	E. Garrison.....	120	6,900	1923	Grey Lag (5).....	E. Sande.....	135	7,800
390	Salvator (4).....	I. Murphy.....	127	6,900	1924	Mad Hatter (8).....	E. Sande.....	125	9,150
391	Loantaka (5).....	M. Bergen.....	110	9,900	1925	Sting (4).....	B. Bruening.....	122	11,300
392	Montana (4).....	E. Garrison.....	115	17,750	1926	Crusader (3).....	J. Callahan.....	104	13,150
393	Lowlander (5).....	P. McDermott.....	105	17,750	1927	Crusader (4).....	C. Kummer.....	127	11,875
394	Ramapo (4).....	F. Taral.....	120	12,070	1928	Dolan (4).....	J. Callahan.....	105	13,675
395	Lazzarone (4).....	A. Hamilton.....	115	4,730	1929	Bateau (4).....	E. Ambrose.....	112	14,100
396	Henry of Navarre (5).....	H. Griffin.....	129	5,850	1930	Petea Wrack (5).....	E. Sande.....	122	11,850
397	Ben Brush (4).....	W. Simms.....	123	5,850	1931	Mokatam (4).....	A. Robertson.....	123	11,200
398	Tills (4).....	A. Clayton.....	119	6,800	1932	White Clover II (6).....	R. Workman.....	115	11,100
399	Imp (5).....	N. Turner.....	114	6,800	1933	Equipoise (5).....	R. Workman.....	132	7,250
400	Kinley Mack (4).....	P. McCue.....	125	6,800	1934	Ladysman (4).....	S. Coucci.....	114	5,750
401	Alcedo (4).....	H. Spencer.....	112	7,800	1935	Head Play (5).....	C. Kurtzinger.....	114	12,175
402	Gold Heels (4).....	O. Wonderly.....	124	7,800	1936	Firethorn (4).....	H. Richards.....	116	12,125
403	Africander (3).....	G. Fuller.....	110	16,490	1937	Aneroid (4).....	C. Rosengarten.....	110	10,950
404	Hermis (5).....	A. Redfern.....	127	16,800	1938	Snark (5).....	J. Longden.....	129	17,050
405	Beldame (4).....	F. O'Neill.....	123	16,800	1939	Cravat (4).....	J. Westrope.....	121	17,750
406	Go Between (5).....	W. Shaw.....	116	16,800	1940	Eight Thirty (4).....	H. Richards.....	127	19,850
407	Nealon (4).....	W. Dugan.....	113	16,800	1941	Your Chance (4).....	D. Meade.....	114	25,200
408	Ballot (4).....	J. Notter.....	127	19,750	1942	Market Wise (4).....	B. James.....	124	27,800
409	Fitz Herbert (3).....	E. Dugan.....	105	3,850	1943	Don Bingo (4).....	J. Renick.....	104	27,600
410	Olambala (4).....	G. Archibald.....	115	4,800	1944	Aletern (5).....	H. Lindberg.....	108	39,210
411	Whisk Broom II (6).....	J. Notter.....	139	3,000	1945	Devil Diver (6).....	E. Arcaro.....	132	34,995
412	Strimboli (4).....	C. Turner.....	122	3,925	1946	Armed (5).....	D. Dodson.....	130	43,000
413	Fiori Rock (3).....	M. Garner.....	101	3,450	1947	Assault (4).....	E. Arcaro.....	130	40,000
414	Boots (6).....	J. Loftus.....	122	4,900	1948	Harmonica (4).....	W. Mehrtens.....	109	39,700

TRAVERS STAKES

Saratoga; 3-year-olds; 1 1/4 miles.

Distance 1 1/4 miles; prior to 1890: 1 1/2 miles in 1890, 1891, and 1892; 1 1/4 miles in 1893, 1894 and 1897; 1 1/4 miles in 1895, 1901, 1902, and 1903. Run as Travers Midsummer Derby from 1927 to 1932, inclusive. Run at Belmont Park from 1943 to 1945, inclusive.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1864	Kentucky.....	Gilpatrick.....	100	\$2,950	1884	Rataplan.....	Fitzpatrick.....	118	\$4,150
1865	Maiden.....	Sewell.....	97	3,400	1885	Bersan.....	Spellman.....	118	4,025
1866	Merrill.....	Abe.....	100	3,500	1886	Inspector B.....	J. McLaughlin.....	118	3,825
1867	Ruthless.....	Gilpatrick.....	103	2,850	1887	Carey.....	Blaylock.....	118	3,825
1868	The Banshee.....	Smith.....	97	3,150	1888	Sir Dixon.....	J. McLaughlin.....	118	4,625
1869	Glengel.....	C. Miller.....	110	3,000	1889	Long Dance.....	Barnes.....	118	3,700
1870	Kingfisher.....	C. Miller.....	110	4,950	1890	Sir John.....	Bergen.....	118	4,925
1871	Harry Bassett.....	W. Miller.....	110	5,600	1891	Vallera.....	R. Williams.....	122	2,900
1872	Joe Daniels.....	J. Rowe.....	110	5,500	1892	Azra.....	Clayton.....	122	2,750
1873	Tom Bowling.....	R. Swim.....	110	5,400	1893	Stowaway.....	McDermott.....	107	2,450
1874	Attila.....	Barbee.....	110	5,050	1894	Henry of Navarre.....	Taral.....	125	2,350
1875	D'Artagnan.....	Barbee.....	110	4,850	1895	Liza.....	Griffin.....	104	1,125
1876	Sultana.....	Hayward.....	107	3,700	1897	Rensselaer.....	Taral.....	126	1,425
1877	Baden Baden.....	Sayers.....	110	4,550	1901	Blues.....	Shaw.....	126	6,750
1878	Duke of Magenta.....	Hughes.....	118	4,250	1902	Hermis.....	Rice.....	111	6,750
1879	Falsetto.....	I. Murphy.....	118	4,950	1903	Ada Nay.....	F. O'Neill.....	106	8,150
1880	Grenada.....	Hughes.....	118	3,750	1904	Broomstick.....	T. Burns.....	129	5,850
1881	Hindoo.....	J. McLaughlin.....	118	2,950	1905	Dandelion.....	Shaw.....	111	8,350
1882	Carley B.....	Quantrell.....	115	3,450	1906	Gallavant.....	W. Miller.....	111	5,800
1883	Barnes.....	J. McLaughlin.....	118	3,400	1907	Frank Gill.....	Notter.....	129	5,800

Travers Stakes—(cont.)

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	win val.
1908	Dorante	J. Lee	116	5,800	1930	Jim Dandy	F. J. Baker	120	\$27,050
1909	Hilarious	Scoville	129	5,800	1931	Twenty Grand	L. McAtee	126	33,000
1910	Dalmatian	C. H. Shilling	129	4,825	1932	War Hero	J. Gilbert	115	23,150
1913	Rock View	T. McTaggart	129	2,725	1933	Inlander	R. Jones	126	21,050
1914	Roamer	J. Butwell	123	3,000	1934	Observant	L. Humphries	112	14,650
1915	Lady Rotha	M. Garner	106	2,150	1935	Gold Foam	S. Coucci	112	14,675
1916	Spur	J. Loftus	129	3,125	1936	Granville	J. Stout	127	14,700
1917	Omar Khayyam	J. Butwell	129	5,350	1937	Burning Star	W. D. Wright	117	14,550
1918	Sun Briar	W. Knapp	120	7,700	1938	Thanksgiving	E. Arcaro	117	14,400
1919	Hannibal	L. Ensor	120	9,835	1939	Eight Thirty	H. Richards	117	16,575
1920	Man o' War	A. Schuttinger	129	9,275	1940	Fenelon	J. Stout	122	17,425
1921	Sporting Blood	L. Lyke	116	10,275	1942	Shut Out	A. Robertson	130	16,900
1922	Little Chief	L. Fator	123	11,325	1943	Eurasian	E. Arcaro	130	17,825
1923	Wilderness	B. Marinelli	120	13,550	1944	By Jimminy	S. Brooks	112	19,850
1924	Sun Flag	F. Keogh	115	14,675	1945	Adonis	E. Arcaro	126	25,015
1925	Dangerous	C. Kummer	115	13,425	1946	Natchez	C. McCreary	110	28,680
1926	Mars	F. Coliletti	123	15,050	1947	Young Peter	T. Atkinson	124	24,750
1927	Brown Bud	L. Fator	120	29,925	1947	Young Peter	T. May	124	19,375
1928	Petea-Wrack	S. O'Donnell	117	30,550	1948	Ace Admiral	T. Atkinson	108	19,650
1929	Beacon Hill	A. Robertson	117	31,820					

WASHINGTON PARK FUTURITY

Washington Park; 2-year-olds; 3/4 mile.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1937	Tiger	A. Robertson	117	\$26,135	1944	Free for All	O. Grohs	122	\$47,850
1940	Porter's Cap	C. Bierman	117	30,780	1945	Revoked	A. Bodiou	118	56,700
1941	Alsab	R. L. Vedder	119	32,575	1946	Education	J. Adams	118	65,125
1942	Occupation	L. Balaski	122	58,475	1947	Bewitch	D. Dodson	119	63,150
1943	Occupy	L. Whiting	113	43,625	1948	Model Cadet	T. Skoronski	118	60,750

WIDENER

Hialeah Park; 3-year-olds and over; 1 1/4 miles

Run as Widener Challenge Cup Handicap prior to 1938. Run as Widener Handicap from 1938 to 1944, inclusive.

Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
1936	Mantagna (4)	E. Litzenberger	109	\$10,150	1942	The Rhymer (4)	E. Arcaro	111	\$53,950
1937	Columbiana (4)	H. Le Blanc	103	52,000	1944	Four Freedoms (4)	E. Arcaro	109 1/2	29,350
1938	War Admiral (4)	C. Kutsinger	130	49,550	1946	Armed (5)	D. Dodson	128	45,700
1939	Bull Lea (4)	I. Anderson	119	46,450	1947	Armed (6)	D. Dodson	129	43,900
1940	Many Stings (5)	R. Donoso	109	52,000	1948	El Mono (4)	P. Roberts	112	43,800
1941	Big Pebble (5)	G. Seabo	109	51,800					

WOOD MEMORIAL

Jamaica; 3-year-olds; 1 1/16 miles

Run as Wood Stakes prior to 1927. Distance 1 mile and 70 yards from 1925 to 1939, inclusive. Run as Wood Memorial Stakes from 1927 to 1941, inclusive. Run in two divisions in 1944, 1945, and 1947.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1925	Backbone	I. Parke	110	\$7,600	1939	Johnstown	J. Stout	120	\$17,675
1926	Pompey	B. Breuning	120	8,700	1940	Dit	L. Haas	120	19,225
1927	Saxon	G. Ellis	117	9,050	1941	Market Wise	D. Meade	120	16,650
1928	Distraction	D. McAuliffe	120	11,300	1942	Requested	W. D. Wright	120	22,900
1929	Essare	M. Garner	110	11,000	1943	Count Fleet	J. Longden	126	20,150
1930	Gallant Fox	E. Sande	120	10,150	1944	Stir Up	E. Arcaro	126	19,625
1931	Twenty Grand	C. Kutsinger	120	10,200	1944	Lucky Draw	J. Longden	126	20,115
1932	Universe	L. McAtee	120	10,400	1945	Jeep	A. Kirkland	126	18,945
1933	Mr. Khayyam	P. Walls	122	3,760	1945	Hoop Jr.	E. Arcaro	126	18,945
1934	High Quest	D. Bellizzi	120	3,990	1946	Assault	W. Mehrtens	126	22,600
1935	Today	R. Workman	112	11,350	1947	Phalanx	E. Arcaro	126	31,325
1936	Teufel	E. Litzenberger	112	10,775	1947	I Will	E. Arcaro	126	31,625
1937	Melodist	J. Longden	120	19,105	1948	My Request	D. Dodson	126	34,600
1938	Fighting Fox	J. Stout	120	\$17,450					

Calumet Sets Single-Day Record

On May 15, 1948, Warren Wright's Calumet Farm won the Preakness at Pimlico with Citation and finished one-two with

Faultless and Fervent in the \$75,000-added Gallant Fox Handicap at Jamaica to set a single-day earnings record of \$189,670.

Man o' War's Record

(Bred by August Belmont. Owned by Glen Riddle Farm.)

1919

Date	Track	Race	Dist.	Wt.	Fin.	Time	Odds	Earnings
June 6	Belmont Park	Purse	¾ st	115	1	:59	3-5	\$ 500
June 9	Belmont Park	Keene Memorial Stakes	5½f st	115	1	1:05½	7-10	4,200
June 21	Jamaica	YOUTHFUL STAKES	5½f	120	1	1:06½	1-2	3,850
June 23	Aqueduct	Hudson Stakes	¾	130	1	1:01½	1-10	2,825
July 5	Aqueduct	Tremont Stakes	¾	130	1	1:13	1-10	4,800
Aug. 2	Saratoga	United States Hotel Stakes	¾	130	1	1:12½	9-10	7,600
Aug. 13	Saratoga	Sanford Memorial Stakes	¾	130	2	1:11½	11-20	700
Aug. 23	Saratoga	Grand Union Hotel Stakes	¾	130	1	1:12	11-20	7,600
Aug. 30	Saratoga	Hopeful Stakes	¾	130	1	1:13	9-20	24,600
Sept. 13	Belmont Park	Belmont Futurity	¾ st	127	1	1:11½	1-2	26,650
Total.....								\$83,325

1920

Date	Track	Race	Dist.	Wt.	Fin.	Time	Odds	Earnings
May 18	Pimlico	Preakness Stakes	1½	126	1	1:51½	4-5	\$23,000
May 29	Belmont Park	Withers Stakes	1	118	1	1:35½	1-7	4,825
June 12	Belmont Park	Belmont Stakes	1½	126	1	2:14½	1-25	7,950
June 22	Jamaica	Stuyvesant Handicap	1	135	1	1:41½	1-100	3,850
July 10	Aqueduct	Dwyer Stakes	1½	126	1	1:49½	1-5	4,850
Aug. 7	Saratoga	Miller Stakes	1½	131	1	1:56½	1-30	4,700
Aug. 21	Saratoga	Travers Stakes	1½	129	1	2:01½	2-9	9,275
Sept. 4	Belmont Park	Lawrence Realization Stakes	1½	126	1	2:40½	1-100	15,040
Sept. 11	Belmont Park	Jockey Club Stakes	1½	118	1	2:28½	1-100	5,850
Sept. 18	Havre de Grace	Potomac Handicap	1½	138	1	1:44½	15-100	6,800
Oct. 12	Kenilworth Park	Kenilworth Park Gold Cup	1½	120	1	2:03	1-20	80,000
Total.....								\$166,140

RECAPITULATION

Year	Age	Sts.	1st	2d	3d	Unp.	Earnings
1919	2	10	9	1	0	0	\$ 83,325
1920	3	11	11	0	0	0	166,140
Totals		21	20	1	0	0	\$249,465

(Man o' War died on Nov. 1, 1947.)

FACTS ON STYMIE

Stymie, world's leading money-winning Thoroughbred, was retired for the year after suffering a broken ankle bone in the Monmouth Handicap at Monmouth Park on

July 24, 1948. The son of Equestrian-Stop Watch, by On Watch, was bred by Max Hirsch, is owned by Mrs. Ethel D. Jacobs and is trained by Hirsch Jacobs.

Stymie's Stake Victories

1945					1947				
Date	Event	Dist.	Wt.	Earnings	Date	Event	Dist.	Wt.	Earnings
June 2	Grey Lag Handicap	1½	121	1:49½ \$10,640	May 10	Metropolitan Handicap I	124	1:37½	21,650
July 4	Brooklyn Handicap	1½	116	2:02½ 39,120	June 28	Questionnaire Handicap I½	125	1:44	18,225
July 28	Butler Handicap	1½	121	1:56½ 38,770	July 5	Sussex Handicap	1½	128	2:02½ 20,850
Aug. 25	Saratoga Cup	1½	126	2:58 18,645	July 19	Empire Gold Cup	1½	126	2:42½ 73,000
Oct. 6	Continental Handicap	1½	122	1:43½ 11,355	July 30	Massachusetts Handicap I½	128	1:50	41,150
Nov. 3	Westchester Handicap	1½	125	1:56½ 38,765	Sept. 1	Aqueduct Handicap	1½	132	1:44½ 20,050
Nov. 24	Riggs Handicap	1½	123	2:00 23,600	Oct. 25	Gallant Fox Handicap	1½	125	2:44½ 56,350
Nov. 30	Pimlico Cup Handicap	2½	128	4:35½ 21,600					
1946					1948				
May 4	Grey Lag Handicap	1½	127	1:49½ 24,750	May 22	Metropolitan Handicap I	126	1:36½	21,200
Aug. 10	Whitney Stakes	1½	120	2:07½ 19,350	June 26	Aqueduct Handicap	1½	130	1:45½ 19,750
Aug. 31	Saratoga Cup	1½	126	3:07½ 6,125	July 3	Sussex Handicap	1½	130	2:02 21,450
Sept. 14	Edgemere Handicap	1½	121	1:50½ 19,750					
Sept. 25	Manhattan Handicap	1½	126	2:29½ 20,050					
Sept. 12	New York Handicap	2½	128	3:51½ 41,200					
Oct. 26	Gallant Fox Handicap	1½	126	2:42½ 59,050					

*Walkover.

HUNT MEETINGS
Other Winners, 1948

MARY MELLON—Mrs. Stephen C. Clark,
Jr.'s Trough Hill
NOEL LAING—Ella A. Widener's Adapta-
ble

Stymie's Record by Years

Year	Age	Sts.	1st	2d	3d	Unp.	Earnings
1943	2	28	4	8	4	12	\$ 15,935
1944	3	29	3	5	10	11	36,325
1945	4	19	9	4	4	2	225,375
1946	5	20	8	7	4	1	238,650
1947	6	19	7	5	2	5	299,775
1948	7	11	4	3	2	2	95,275
Totals		126	35	32	26	33	\$911,335

THE JOCKEY CLUB

Though its original charter was dated Feb. 8, 1894, The Jockey Club, parent body of the American turf, might well be considered as having completed its fifty-seventh year of service to thoroughbred racing in 1948 because the Board of Control, forerunner of The Jockey Club, was organized in 1891. Membership is limited to fifty, with The Earl of Derby the only honorary member.

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MEMBERS OF THE JOCKEY CLUB

	Year elected
L. A. Beard.....	1944
Albert C. Bostwick.....	1930
George H. Bostwick.....	1942
James Cox Brady.....	1939
W. L. Brann.....	1939
Howard Bruce.....	1939
Henry W. Bull.....	1928
Carleton F. Burke.....	1937
James Butler.....	1946
F. Ambrose Clark.....	1919
John C. Clark.....	1943
Joseph E. Davis.....	1920
William du Pont, Jr.....	1932
Robert A. Fairbairn.....	1926
Marshall Field.....	1922

	Year elected
Russell A. Firestone.....	1948
Robert L. Gerry.....	1913
Arnold Hanger.....	1939
William F. Hitt.....	1937
Wm. Harding Jackson.....	1947
Walter M. Jeffords.....	1925
Robert J. Kleberg.....	1939
A. K. Macomber.....	1917
Paul Mellon.....	1947
A. H. Morris.....	1894
John A. Morris.....	1928
Crispin Oglebay.....	1943
Henry A. Parr, III.....	1943
H. C. Phipps.....	1930
Ogden Phipps.....	1939

Honorary Member—Earl of Derby

	Year elected
Samuel D. Riddle.....	1920
Donald P. Ross.....	1941
A. G. C. Sage.....	1928
W. Plunket Stewart.....	1932
Whitney Stone.....	1939
Alfred G. Vanderbilt.....	1937
F. S. von Stade.....	1935
George H. Walker.....	1926
Cornelius V. Whitney.....	1930
John Hay Whitney.....	1928
George D. Widener.....	1916
William Woodward.....	1917
Warren Wright.....	1937
William Ziegler, Jr.....	1938

Address—250 Park Avenue, New York 17, N. Y.

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Atlantic City
Bel Air
Belmont Park
Churchill Downs
Delaware Park
Del Mar
Empire City
Fair Grounds (New Orleans)
Garden State Park

Golden Gate Fields
Havre de Grace
Hialeah Park
Hollywood
Jamaica
Keeneland
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Lincoln Fields
Longacres
Monmouth
Narragansett Park
Oaklawn Park

Pimlico
Rockingham Park
Santa Anita
Saratoga
Sportsman's Park
Suffolk Downs
Tanforan
Timonium
Tropical Park
Washington Park

Address—400 Madison Avenue, New York 17, N. Y.

LEADING ALL-TIME MONEY-WINNING THOROUGHBREDS

(Through Nov. 13, 1948)

Horse	Owner	Amount	Starts	1st	2d	3d	Win pct.
Stymie	Mrs. Ethel D. Jacobs	\$911,335	126	35	32	26	.278
Citation	Calumet Farm	830,250	27	25	2	0	.928
Armed	Calumet Farm	773,700	63	36	14	5	.571
Assault	Robert J. Kleberg	626,620	33	16	5	5	.485
Whirlaway	Calumet Farm	561,161	60	32	15	9	.533
*Gallorette	Mrs. Marie Moore	445,535	72	21	20	13	.292
Seabiscuit	Charles S. Howard	437,730	89	33	15	13	.371
On Trust	E. O. Stice & Sons	424,470	48	17	11	9	.354
Phalanx	C. V. Whitney	407,035	38	12	7	10	.316
First Fiddle	Mrs. E. D. Mulrenan	398,610	95	23	24	20	.242

*Purchased from William L. Brann in 1948.

LEADING MONEY-WINNING OWNERS
(Since 1930)

Year	Name	Amount
1930	C. V. Whitney	\$385,972
1931	C. V. Whitney	422,923
1932	C. V. Whitney	403,681
1933	C. V. Whitney	241,292
1934	Brookmeade Stable	251,138
1935	A. G. Vanderbilt	303,605
1936	Milky Way Farm Stable	206,450
1937	Mrs. Charles S. Howard	214,559
1938	H. Maxwell Howard	226,495
1939	Belair Stud	284,250
1940	Charles S. Howard	334,120
1941	Calumet Farm	475,091
1942	Greentree Stable	414,432
1943	Calumet Farm	267,915
1944	Calumet Farm	601,660
1945	Maine Chance Farm	589,170
1946	Calumet Farm	564,095
1947	Calumet Farm	1,402,436
1948	*Calumet Farm	1,233,560

*Through Nov. 17.

LEADING TRAINERS SINCE 1930
(Winners saddled)

Year	Name	Winners	Money won
1930	C. B. Irwin	92	\$ 70,411
1931	J. D. Mikel	72	49,770
1932	G. Alexandra	76	55,890
1933	H. Jacobs	116	76,965
1934	H. Jacobs	127	113,055
1935	H. Jacobs	114	95,155
1936	H. Jacobs	177	155,789
1937	H. Jacobs	134	142,474
1938	H. Jacobs	109	116,609
1939	H. Jacobs	106	100,907
1940	D. Womeldorff	108	112,137
1941	H. Jacobs	123	165,964
1942	H. Jacobs	133	186,371
1943	H. Jacobs	128	210,775
1944	H. Jacobs	117	306,821
1945	S. Lipiec	127	238,361
1946	W. Molter	122	329,725
1947	W. Molter	155	833,970
1948	*W. Molter	168	.....

*Through Nov. 17.

LEADING JOCKEYS SINCE 1930
(Winners ridden)

Year	Jockey	Mounts	Winners	Un-placed	Pct.
1930	H. R. Riley	861	177	416	.21
1931	H. Roble	1,174	173	673	.15
1932	J. Gilbert	1,050	212	534	.20
1933	J. Westrope	1,224	301	522	.25
1934	M. Peters	1,045	221	498	.21
1935	C. Stevenson	1,099	206	578	.19
1936	B. James	1,106	245	505	.22
1937	J. Adams	1,265	260	642	.21
1938	J. Longden	1,150	236	575	.21
1939	D. Meade	1,284	255	628	.20
1940	E. Dew	1,377	287	709	.21
1941	D. Meade	1,164	210	611	.18
1942	J. Adams	1,120	245	540	.22
1943	J. Adams	1,069	228	511	.21
1944	T. Atkinson	1,539	287	808	.19
1945	J. D. Jessop	1,085	290	445	.27
1946	T. Atkinson	1,377	233	758	.17
1947	J. Longden	1,327	316	566	.24
1948	*J. Longden	1,078	295	439	.27

*Through Nov. 17.

TOP MONEY-WINNING THOROUGHBREDS
(Since 1930)

Year	Horse and age	Starts	1st	Amount
1930	Gallant Fox (3)	10	9	\$308,275
1931	Top Flight (2)	7	7	219,000
1932	Gusto (3)	16	4	145,940
1933	Singing Wood (2)	9	3	88,050
1934	Cavalcade (3)	7	6	111,235
1935	Omaha (3)	9	6	142,255
1936	Granville (3)	11	7	110,295
1937	Seabiscuit (4)	15	11	168,580
1938	Stagedhand (3)	15	8	189,710
1939	Challedon (3)	15	9	184,535
1940	Bimelech (3)	7	4	110,005
1941	Whirlaway (3)	20	13	272,386
1942	Shut Out (3)	12	8	238,872
1943	Count Fleet (3)	6	6	174,055
1944	Pavot (2)	8	8	179,040
1945	Busher (3)	13	10	273,735
1946	Assault (3)	15	8	424,195
1947	Armed (6)	17	11	376,325
1948	*Citation (3)	18	17	674,570

*Through Nov. 17.

WORLD RECORDS

Distance	Horse, age, weight, track and date	Time
$\frac{1}{4}$	Big Racket, 4, 111, Hipodromo de las Americas, Mexico City, Mexico; February 5, 1945.	:20 $\frac{1}{2}$
$2\frac{1}{2}$ f	Tie Score, 5, 115, Hipodromo de las Americas, Mexico City, Mexico; Feb. 5, 1946.	:26 $\frac{1}{2}$
$\frac{3}{8}$	Atoka, 6, 105, Butte, Mont.; Sept. 7, 1906.	:33 $\frac{1}{2}$
$3\frac{1}{2}$ f	Joe Blair, 5, 115, Juarez, Mexico; February 5, 1916.	:39
$\frac{1}{2}$	Tie Score, 4, 111, Hipodromo de las Americas, Mexico City, Mexico; April 1, 1945.	:45 $\frac{1}{2}$
$4\frac{1}{2}$ f	Saggy, 2, 117, Havre de Grace, Md., April 23, 1947.	:51 $\frac{1}{2}$
$\frac{3}{4}$	Pan Zareta, 5, 120, Juarez, Mexico; February 10, 1915.	:57 $\frac{1}{2}$
$5\frac{1}{2}$ f	Nance's Ace, 3, 112, Tropical Park, Coral Gables, Fla.; December 27, 1944.	1:03 $\frac{1}{2}$
$5\frac{3}{4}$ f	Fighting Fox, 4, 126, Empire City, Yonkers, N. Y.; July 8, 1939.	1:07 $\frac{3}{4}$
$\frac{3}{4}$	*Gelding by Broken Tendril, 3, 123, Brighton, England; August 6, 1929.	1:06 $\frac{1}{4}$
	Fair Truckle, 4, 119, Golden Gate Fields, Albany, Calif.; Oct. 4, 1947.	1:08 $\frac{3}{4}$
$6\frac{1}{2}$ f	Snark, 4, 109, Hialeah Park, Miami, Fla.; February 9, 1937.	1:15 $\frac{1}{2}$
$\frac{7}{8}$	Buzfuz, 5, 120, Hollywood Park, Inglewood, Calif.; June 20, 1947.	1:21 $\frac{1}{2}$
	Honeymoon, 4, 114, Hollywood Park, Inglewood, Calif.; June 3, 1947.	1:21 $\frac{1}{2}$
1	Equipoise, 4, 128, Arlington Park, Arlington Heights, Ill.; June 30, 1932.	1:34 $\frac{1}{2}$
	Prevaricator, 5, 118, Golden Gate Fields, Albany, Calif.; October 2, 1948.	1:34 $\frac{1}{2}$
1mi.70yd.	South Dakota, 3, 122, River Downs, Cincinnati, Ohio; August 4, 1945.	1:40
$1\frac{1}{4}$	Count Speed, 4, 122, Golden Gate Fields, Albany, Calif.; Oct. 4, 1947.	1:41
$1\frac{1}{2}$	Indian Broom, 3, 94, Tanforan, San Bruno, Calif.; April 11, 1936.	1:47 $\frac{1}{2}$
$1\frac{3}{4}$	Shannon II, 7, 124, Golden Gate Fields, Albany, Calif.; October 16, 1948.	1:47 $\frac{3}{4}$
	Challedon, 3, 120, Keeneland, Lexington, Ky.; October 10, 1939.	1:54 $\frac{1}{2}$
	Lucky Draw, 5, 123, Narragansett Park, Pawtucket, R. I.; Sept. 14, 1946.	1:54 $\frac{3}{4}$
$1\frac{1}{4}$	Saint Andrews II, 7, 133, Brighton, England; June 21, 1939.	1:59 $\frac{1}{2}$
$1\frac{1}{2}$	Man o' War, 3, 126, Belmont Park, Long Island, N. Y.; June 12, 1920.	2:14 $\frac{1}{2}$
$1\frac{1}{2}$	The Bastard, 3, 124, Newmarket, England; October 18, 1929.	2:23
$1\frac{3}{4}$	Man o' War, 3, 126, Belmont Park, Long Island, N. Y.; September 4, 1920.	2:40 $\frac{1}{2}$
	Historian, 5, 121, Hollywood Park, Inglewood, Calif.; Aug. 3, 1946.	2:40 $\frac{3}{4}$
1mi.5 $\frac{1}{2}$ f	Distribute, 9, 109, River Downs, Cincinnati, Ohio; September 7, 1940.	2:51 $\frac{1}{2}$
$1\frac{3}{4}$	Buen Ojo, aged, 133, Montevideo, Uruguay, S. A.; January 8, 1922.	2:52 $\frac{3}{4}$
$1\frac{1}{2}$	Pharawell, 5, 119, Gulfstream Park, Hallandale, Fla., April 8, 1947.	3:13 $\frac{1}{2}$
2	Polazel, 3, 142, Salisbury, England; July 8, 1924.	3:15
2mi.40yd.	Winning Mark, 4, 107, Thistle Down Park, Cleveland, Ohio; July 20, 1940.	3:29 $\frac{3}{4}$
2mi.70yd.	Filisteo, 7, 116, Pimlico, Md.; October 30, 1941.	3:30 $\frac{3}{4}$
$2\frac{1}{8}$	Momo Flag, 4, 120, Narragansett Park, Pawtucket, R. I.; September 27, 1944.	3:33 $\frac{1}{4}$
$2\frac{1}{2}$	Centurion, 5, 119, Newbury, England; September 29, 1923.	3:35
$2\frac{3}{8}$	Santiago, 5, 112, Narragansett Park, Pawtucket, R. I.; September 27, 1941.	3:51 $\frac{1}{2}$
$2\frac{1}{4}$	Dakota, 4, 116, Lingfield, England; May 27, 1927.	3:37 $\frac{3}{4}$
$2\frac{3}{4}$	Wiki Jack, 4, 97, Tijuana, Mexico; February 8, 1925.	4:15
$2\frac{3}{4}$	Miss Grillo, 6, 118, Pimlico, Md.; November 12, 1948.	4:14 $\frac{1}{2}$
$2\frac{3}{4}$	†Worthman, 5, 101, Tijuana, Mexico; February 22, 1925.	4:51 $\frac{1}{2}$
$2\frac{3}{4}$	Shot Put, 4, 126, Washington Park, Homewood, Ill.; August 14, 1940.	4:48 $\frac{1}{2}$
$2\frac{3}{4}$	†Bosh, 5, 100, Tijuana, Mexico; March 8, 1925.	5:23
3	Farragut, 5, 113, Agua Caliente, Mexico; March 9, 1941.	5:15
$3\frac{1}{2}$	Winning Mark, 4, 104, Washington Park, Homewood, Ill.; August 21, 1940.	6:13
4	Sotemia, 5, 119, Churchill Downs, Louisville, Ky.; October 7, 1912.	7:10 $\frac{1}{2}$

*3/4 mile course at Brighton is started from a hill and is down grade to within one-third of a mile of the finish. †Track heavy. ‡Track sloppy.

Straight Course

Distance	Horse, age, weight, track and date	Time
$\frac{1}{4}$	Bob Wade, 4, 122, Butte, Mont.; August 20, 1890.	:21 $\frac{1}{4}$
$\frac{1}{2}$	King Rhymer, 2, 118, Santa Anita Park, Arcadia, Calif.; Feb. 27, 1947.	:32
$\frac{3}{8}$	Gloaming, 6, 127, Trentham, Wellington, New Zealand; January 12, 1921.	:45
$4\frac{1}{2}$ f	Algair, 2, 116, Belmont Park, Long Island, N. Y.; June 16, 1948.	:50 $\frac{1}{2}$
$\frac{5}{8}$	Devineress, 3, 103, Epsom Downs, Epsom, England; June 2, 1933.	:54 $\frac{1}{2}$
$5\frac{1}{2}$ f	Plater, 2, 107, Morris Park, New York, N. Y.; October 21, 1902.	1:02 $\frac{1}{2}$
$\frac{3}{4}$	Artful, 2, 130, Morris Park, New York, N. Y.; October 15, 1904.	1:08
$6\frac{1}{2}$ f	Porter's Mite, 2, 119, Belmont Park, Long Island, N. Y.; September 17, 1938.	1:14 $\frac{1}{2}$
*Abt $\frac{7}{8}$	High Strung, 2, 122, Belmont Park, Long Island, N. Y.; September 15, 1928.	1:19
$\frac{7}{8}$	First Edition, 4, 126, Hurst Park, Hampton Court, England; May 25, 1926.	1:20
1	Mopuss, 3, 105, Brighton, England; June 22, 1939.	1:32
$1\frac{1}{4}$	Banquet, 3, 108, Monmouth Park, New Jersey; July 17, 1890.	2:03 $\frac{1}{2}$

*165 feet short of 7/8 mile.

Mexican Stake Winners, 1948

(At Hipodromo de las Americas)

Stake, winner, jockey, weight	Win val.
HANDICAP DE LAS AMERICAS—Sleto Leguas, E. Sylvia, 109	\$21,765
DERBY MEXICANO—The Gike, E. Sylvia, 115.	16,390

CITATION'S RECORD BY YEARS
(Through October 29, 1948)

Year	Age	Starts	1st	2d	3d	Earnings
1947	2	9	8	1	0	\$155,680
1948	3	18	17	1	0	674,570
Totals	27	25	2	0	0	\$830,250

OTHER STAKE WINNERS IN 1948

(This compilation does not include victors listed in tabular matter.)

Key to Abbreviations Used

AQ—Aqueduct (N. Y.)	EC—Empire City (N. Y.)*	HO—Hollywood Park (Calif.)	P—Pimlico (Md.)
AP—Arlington Park (Ill.)	FG—Fair Grounds (La.)	J—Jamaica (N. Y.)	RP—Rockingham Park (N.H.)
AC—Atlantic City (N. J.)	GS—Garden State (N. J.)	K—Keeneland (Ky.)	S—Saratoga (N.Y.)
B—Bay Meadows (Calif.)	GG—Golden Gate (Calif.)	L—Laurel Park (Md.)	SA—Santa Anita Park (Cal.)
BE—Belmont Park (N. Y.)	GP—Gulfstream Park (Fla.)	LF—Lincoln Fields (Ill.)†	SD—Suffolk Downs (Mass.)
BO—Bowie (Md.)	HG—Havre de Grace (Md.)	MP—Monmouth Park (N. J.)	T—Tanforan (Calif.)
CD—Churchill Downs (Ky.)	HP—Hialeah Park (Fla.)	N—Naragansett Park (R. I.)	TP—Tropical Park (Fla.)
DP—Delaware Park (Del.)	HA—Hawthorne Park (Ill.)	OP—Oaklawn Park (Ark.)	WP—Washington Park (Ill.)
DM—Del Mar (Calif.)			

*At Jamaica. †At Washington Park.

3-Year-Olds and Over

Stake, track, winner, jockey, weight	Win val.
ALL AMERICAN (AC)—Rampart, M. Basile, 118	\$11,375
AMERICAN (HO)—Stepfather, E. Pederson, 111	32,400
AQUEDUCT (AQ)—Stymie, R. Permane, 130	19,750
ARGONAUT (HO)—Shannon 2nd, J. Adams, 112	32,400
ARLINGTON (AP)—Stud Poker, R. L. Baird, 110	38,000
BAY MEADOWS (B)—Mafosta, J. Longden, 126	41,600
BELDAME (AQ)—Conniver, D. Dodson, 121	49,700
BEN ALI (K)—Fervent, N. L. Pierson, 124	9,350
BEVERLY (WP)—Honeymoon, J. Westrope, 121	21,900
BIDWELL MEMORIAL (HA)—Oration, F. A. Smith, 101	18,000
BLACK HELEN (HP)—Shotsilk, W. Cook, 96	
(S10,950) and Rampart, M. Basile, 120	10,950
CAMDEN (GS)—Macbeth, J. Stout, 108	12,675
CARTER (AQ)—Galloriette, J. D. Jessop, 122	20,550
CHURCHILL DOWNS (CD)—George Gains, A. J. Fernandez, 116	8,500
CLANG (WP)—Rippee, O. Scurlock, 126	19,050
COLONIAL (GS)—Itsabet, W. Mehrtens, 110	14,375
COMELY (EC)—Conniver, E. Guerin, 123	20,200
CORRECTION (J)—Carolyn A., C. LeBlanc, 110	14,825
CINGERFIELD (EC)—Phalanx, S. Clark, 129	20,800
DEL MAR (DM)—Frankly, J. Westrope, 112	18,350
DIXIE (P)—Fervent, N. L. Pierson, 121	21,950
DOUBLE EVENT (1st div.) (TP)—Colosal, R. Nash, 113	11,575
DOUBLE EVENT (2d div.) (TP)—Colosal, R. Nash, 113	10,775
EDGEHURST (AQ)—Loyal Legion, T. Atkinson, 119	19,050
EDWARD BURKE (HG)—Contest, H. Mora, 104	11,950
EMPIRE GOLD CUP (EC—at-B)—Citation, E. Arcaro, 119	75,600
EQUIPOISE MILE (AP)—Fervent, N. L. Pierson, 124	23,000
EXCELSIOR (J)—Knockdown, F. Zufelt, 114	20,750
FALL HIGHWEIGHT (all ages) (BE)—First Flight, E. Arcaro, 123	22,650
FIRENZE (J)—Carolyn A., C. LeBlanc, 114	19,450
FLEETWING (EC)—Buzfuz, C. McCreary, 115	20,200
GOLDEN GATE (GG)—Shannon II, J. Westrope, 124	61,000
GOLDEN GATE MILE (GG)—Prevaricator, J. Longden, 118	12,390
GOLDEN STATE BREEDERS' (HO)—On Trust, J. Longden, 126	33,900
GRASSLAND (AP)—British Isles, O. Scurlock, 111	16,050
GULFSTREAM PARK (GP)—Rampart, M. Basile, 108	20,050
HANNAH DUSTIN (SD)—Liteco, C. Picou, 106	14,750
HAVRE DE GRACE (HG)—Natchez, D. Padgett, 120	11,300
HAWTHORNE GOLD CUP (HA)—Billings, M. Peterson, 122	39,700
INTERBOROUGH (J)—Miss Disco, N. Combest, 109	15,600
JOCKEY CLUB GOLD CUP (BE)—Citation, E. Arcaro, 127	72,700
KEENELAND SPECIAL (K)—Shy Guy, S. Brooks, 117	11,700
LADIES (BE)—Miss Request, T. Atkinson, 114	40,600
LINCOLN (LF)—Challe Anne, F. A. Smith, 110	11,325
LONGACRES MILE (Longacres)—Amble In, N. Richardson, 122	17,450
MCLENNAN (HP)—El Mono, P. Roberts, 112	22,100
MANHATTAN (BE)—Loyal Legion, T. Atkinson, 123	19,600
MATRON (AP)—Four Winds, S. Brooks, 119	\$23,650
MERCHANTS' & CITIZENS' (S)—Beauchef, R. Donoso, 117	15,300
METROPOLITAN (BE)—Stymie, C. McCreary, 126	21,200
MIAMI BEACH (HP)—Stud Poker, D. MacAndrew, 115	13,900
MISTY ISLE (WP)—In the Pink, H. Woodhouse, 109	18,050
MODESTY (AP)—Bewith, H. Woodhouse, 107	20,850
MOLLY PITCHER (MP)—Camargo, C. Kirk, 115	11,900
MONMOUTH (MP)—Tide Rips, P. Roberts, 108	19,850
MYRTLEWOOD (AP)—Daily Dip, H. Keene, 118	18,800
NEW CASTLE (DP)—Miss Grillo, I. Hanford, 119	20,850
NEW ORLEANS (FG)—Star Reward, S. Brooks, 115	19,800
NEW YORK (BE)—Miss Grillo, C. McCreary, 120	19,600
OMNIBUS (MP)—Flash Burn, D. Gorman, 111	12,550
PAUMONOK (J)—Better Self, W. Mehrtens, 112	24,650
PHOENIX (K)—Coaltown, J. Robertson, 108	9,500
PRINCETON (GS)—Rippee, R. J. Martin, 124	12,775
QUEENS COUNTY (AQ)—Knockdown, F. Zufelt, 113	15,025
QUESTIONNAIRE (EC)—Donor, R. Rozelle, 115	20,500
ROCKINGHAM PARK (RP)—Willing Spirit, C. Rogers, 111	5,825
ROGER WILLIAMS (N)—Misleader, W. L. Taylor, 114	13,400
ROSEBEN (BE)—Rippee, E. Guerin, 135	11,775
ROWE MEMORIAL (BO)—Repand, C. Erickson, 106	8,175
SAN ANTONIO (SA)—Talon, E. Arcaro, 122	47,300
SAN CARLOS (SA)—Autocrat, T. Skoronski, 108	42,500
SAN FRANCISCO (T)—Shannon II, J. Westrope, 127	18,800
SAN PASQUEL (SA)—Oihaverry, M. Peterson, 116	45,000
SARATOGA (S)—Loyal Legion, T. Atkinson, 118	19,950
SARATOGA CUP (S)—Snow Goose, J. Jessop, 121	11,000
SHERIDAN (WP)—Star Reward, S. Brooks, 113	19,350
STARS AND STRIPES (AP)—Citation, E. Arcaro, 119	38,000
SUNSET (HO)—Drumbeat, T. Williams, 100	33,100
SUSSEX (DP)—Stymie, R. Permane, 130	21,450
SYSONBY MILE (BE)—Citation, E. Arcaro, 119	20,200
TOBOGGAN (BE)—Rippee, O. Scurlock, 129	20,650
TOP FLIGHT (BE)—Honeymoon, D. Dodson, 124	16,950
TRENTON (GS)—Double Jay, J. Gilbert, 124	22,150
VAGRANCY (AQ)—Conniver, T. Atkinson, 121	20,150
VALLEY FORGE (GS)—Rampart, M. Basile, 109	14,425
VANITY (HO)—Hemet Squaw, R. Neves, 114	16,350
VINELAND (GS)—Honeymoon, D. Dodson, 118	21,650
VOSBURGH (all ages) (BE)—Colosal, O. Scurlock, 118	22,300
WASHINGTON (L)—Quarter Pole, N. L. Pierson, 122	20,650
WASHINGTON PARK (WP)—Fervent, N. L. Pierson, 120	36,000
WESTCHESTER (EC)—Better Self, D. Gorman, 119	39,600
WHIRLAWAY (WP)—Colosal, O. Scurlock, 118	29,525
WILSON (S)—Galloriette, J. Jessop, 115	12,550

*Dead heat.

3-Year-Olds

Stake, track, winner, jockey, weight	Win val.
ACORN (BE)—Watermill, E. Arcaro, 121	\$12,525
ALABAMA (S)—Compliance, T. Atkinson, 112	16,900
ARKANSAS DERBY (OF)—Fertile Lands, P. Glidewell, 120	7,225
ARTFL (WP)—Bewitch, N. L. Pierson, 122	18,200
ASHLAND (K)—Bewitch, N. L. Pierson, 121	18,200
BLUE GRASS (K)—Coaltown, N. L. Pierson, 123	12,300
CALIFORNIA DERBY (B)—May Reward, J. Longden, 126	17,000
C. C. AMERICAN OAKS (BE)—Scattered, W. Mehrtens, 121	43,700
CHESAPEAKE (HG)—Citation, E. Arcaro, 122	19,750
CHESAPEAKE TRIAL (HG)—Saggy, D. MacAndrew, 122	8,360
CHOICE (MP)—Noble Hero, R. J. Martin, 114	19,700
CINEMA (HO)—Drumbeat, O. Webster, 112	19,600
CLEOPATRA (AP)—Bewitch, N. L. Pierson, 122	19,200
DELAWARE OAKS (DP)—Miss Request, C. LeBlanc, 113	19,985
DEL MAR DERBY (DM)—Frankly, G. Pederson, 124	11,875
DERBY TRIAL (CD)—Citation, E. Arcaro, 118	8,525
DICK WELLES (AP)—Papa Redbird, R. L. Baird, 117	19,000
DISCOVERY (AQ)—Better Self, D. Gorman, 123	20,850
DOMINO (AP)—Preoccupy, T. Skoronki, 110	14,900
DREXEL (WP)—Coaltown, N. L. Pierson, 120	18,500
DWYER (AQ)—My Request, T. Atkinson, 121	39,200
EXPERIMENTAL NO. 1 (J)—My Request, E. Arcaro, 122	14,400
EXPERIMENTAL NO. 2 (J)—My Request, E. Arcaro, 122	18,000
EMPIRE CITY (EC)—Miss Request, O. Scurlock, 118	39,700
FLAMINGO (HP)—Citation, A. Snider, 126	43,500
GAZELLE (AQ)—Sweet Dream, R. Permane, 119	19,350
GOLDEN GATE DERBY (GG)—Henpacker, J. Longden, 117	16,650
HOLLYWOOD OAKS (HO)—Flying Rhythm, J. Martin, 110	19,050
JAMAICA (J)—Royal Blood, D. Dodson, 114	16,675
JEROME (BE)—Coaltown, N. L. Pierson, 126	18,500

Stake, track, winner, jockey, weight	Win val.
JERSEY (GS)—Citation, E. Arcaro, 126	\$43,300
KENT (DP)—Page Boots, C. McCreary, 108	23,700
KENTUCKY OAKS (CD)—Challe Anne, W. Garner, 116	19,800
LAMPLIGHTER (MP)—First Nighter, D. Gorman, 113	15,150
LAWRENCE REALIZATION (BE)—Ace Admiral, T. Atkinson, 114	20,400
LOUISIANA DERBY (FG)—Bovard, W. Saunders, 111	11,500
LEONARD RICHARDS (DP)—Page Boots, C. McCreary, 119	20,735
MARYLAND (L)—Quarter Pole, N. L. Pierson, 122	12,200
MONMOUTH OAKS (MP)—Compliance, J. Stout, 113	8,050
PEABODY MEMORIAL (LF)—Billings, M. Peterson, 121	18,200
PETER PAN (BE)—Escadru, A. Kirkland, 123	12,750
PIMLICO OAKS (P)—Scattered, W. Mehrtens, 121	14,550
PRINCESS DOREEN (AP)—Miss Mommy, W. Garner, 121	19,450
PRIORRESS (J)—Itsabet, R. Permane, 116	17,150
PROVIDENCE (N)—Vulcan's Forge, S. Clark, 126	20,450
SAN FELIPE (SA)—May Reward, E. Arcaro, 123	41,400
SAN VICENTE (SA)—Salmagundi, J. Longden, 117	37,600
SANTA SUSANA (SA)—Mrs. Rabbit, R. Permane, 115	41,000
SARANAC (S-at-J)—Mount Marcy, E. Arcaro, 116	16,000
SHEVLIN (AQ)—My Request, E. Arcaro, 126	16,300
SKOKIE (AP)—Piet, M. Corona, 113	14,900
SWIFT (BE)—Coaltown, N. L. Pierson, 126	12,250
THE WESTERNER (HO)—Solidarity, J. Longden, 119	33,300
WILL ROGERS (HO)—Speculation, F. Chojnacki, 115	19,050
WITHERS (BE)—Vulcan's Forge, D. Dodson, 126	20,100
YANKEE (SD)—Better Self, W. Mehrtens, 122	42,500

2-Year-Olds

Stake, track, winner, jockey, weight	Win val.
ARLINGTON LASSIE (AP)—Pail of Water, W. Mehrtens, 119	\$40,350
ASTARITA (AQ)—Neil K., D. Dodson, 114	10,275
ASTORIA (AQ)—Eternal Flag, T. Atkinson, 119	17,250
AUTUMN DAYS (EC)—Boomday, T. Atkinson, 109	12,925
BABYLON (AQ)—Algasir, T. Atkinson, 121	8,775
BETSY ROSS (SD)—Egretta, H. Sconza, 119	8,950
BREEDERS' FUTURITY (K)—Olympia, W. Garner, 122	27,120
CHAMPAGNE (BE)—Capot, T. Atkinson, 110	24,300
CHRISTIANA (DP)—Noble Impulse, C. Kirk, 116	11,400
COLLEEN (MP)—Raise You, J. Breen, 119	9,100
COWDIN (AQ)—Algasir, T. Atkinson, 122	20,750
DEBUTANTE (CD)—Acoma, W. Garner, 119	9,650
DEMOISELLE (EC)—Lithe, W. Garner, 119	47,025
DOVER (DP)—Whiffenpoof, M. Basile, 113 (\$6,437) and Ennobled, O. Scurlock, 119	6,437
EAST VIEW (EC)—Sport Page, E. Arcaro, 122	56,425
FASHION (BE)—Fond Embrace, R. Nash, 114	10,350
FLASH (S)—Algasir, E. Arcaro, 114	9,225
FRIZETTE (J)—Our Fleet, E. Arcaro, 115	13,250
GARDEN STATE (GS)—Blue Peter, W. D. Wright, 122	14,925
GRAND UNION HOTEL (S)—Magic Words, W. Mehrtens, 109	14,950
GREAT AMERICAN (AQ)—Prince Quest, C. LeBlanc, 113	17,325
HAGGIN (HO)—Audacious Man, J. Longden, 114	23,300
HAWTHORNE JUVENILE (HA)—Johns Joy, J. Combett, 116	17,700
HOLLYWOOD LASSIE (HO)—Brenton Light, J. Longden, 113	19,800
HYDE PARK (AP)—Provocative, W. Parnell, 116	16,750
JUVENILE (BE)—Marabout, H. Woodhouse, 113	10,275
KY. JOCKEY CLUB (CD)—Johns Joy, J. Combett, 119	23,545
LAFAYETTE (K)—Irish Sun, A. Loturco, 117	11,950
MARGUERITE (P)—Alsab's Day, R. J. Martin, 114	27,640
MATRON (BE)—Myrtle Charm, T. Atkinson, 119	37,805

Stake, track, winner, jockey, weight	Win val.
MAYFLOWER (SD)—Ocean Drive, W. Garner, 122	\$28,125
NATIONAL STALLION (colts) (BE)—Mr. Busher, F. Zufelt, 119	18,550
NATIONAL STALLION (fillies) (BE)—Green Baize, E. Arcaro, 119	15,070
POLLYANNA (AP)—Alsab's Day, R. L. Baird, 110	19,350
POLLY DRUMMOND (DP)—Raise You, J. Breen, 113	10,650
PRAIRIE STAKE (WP)—Ocean Drive, W. Garner, 122	19,900
PRINCESS PAT (WP)—Sequence, F. A. Smith, 115	41,900
RANCOAS (GS)—Imacom, M. Basile, 110	11,300
REMSEN (J)—Eternal World, T. Atkinson, 122	14,300
SANFORD (S)—Slam Bang, W. Mehrtens, 108	8,250
SAPLING (MP)—Blue Peter, E. Guerin, 122	10,325
SARATOGA SPECIAL (S)—Blue Peter, E. Guerin, 122	10,500
SELIMA (L)—Gaffery, C. Kirk, 114	39,220
STARLET (HO)—Star Fiddle, H. Trent, 118	21,050
TREMONT (AQ)—The Admiral, R. Permane, 108	17,250
U. S. HOTEL (S)—The Admiral, D. Dodson, 118	14,400
WAKEFIELD (EC)—Capot, T. Atkinson, 122	12,425
WALDEN (P)—Stone Age, N. Combett, 113	15,525
YOUTHFUL (J)—Eternal World, T. Atkinson, 117	14,375

BUTLER HANDICAP, 1948

Donor, running in the colors of the late Deering Howe, but entered in the name of Trainer George P. Odom, won the 1948 Butler Handicap at Jamaica. The gelding, ridden by Bobby Permane and carrying 117 pounds, added \$58,850 to his earnings.

(Tabular history of Butler on Page 858.)

HARNESS RACING

OLIVER WENDELL HOLMES, the famous Autocrat of the Breakfast Table, wrote that the running horse was a gambling toy but the trotting horse was useful and, furthermore, "horse-racing is not a republican institution; horse-trotting is." Oliver Wendell Holmes was a born and bred New Englander and New England was the nursery of the harness racing sport in America. Pacers and trotters were matters of local pride and prejudice in Colonial New England and, shortly after the Revolution, the Messenger and Justin Morgan strains produced some winners in harness racing "matches" along the turnpikes of New York, Connecticut, Rhode Island, Massachusetts, Vermont and New Hampshire.

There was English thoroughbred blood in Messenger and Justin Morgan and, many years later, it was blended in Rysdyk's

Hambletonian, foaled in 1849. Hambletonian was not particularly fast under harness but his descendants have had almost a monopoly of prizes, titles and records in the harness racing game. Hambletonian was purchased as a foal with its dam for a total of \$124 by William Rysdyk of Goshen, N. Y. and made a modest fortune for the purchaser.

Trotters and pacers often were raced under saddle in the old days and, in fact, the custom still survives in some places in Europe. Dexter, the great trotter that lowered the mile record from 2:19¼ to 2:17¼ in 1867, was said to handle just as well under saddle as when pulling a sulky. But as sulkies were lightened in weight and improved in design, trotting under saddle became less common and finally faded out in this country.

Harness Racing Statistics

Source: Roger Duncan, Vice-President, United States Trotting Association.

Hambletonian Winners

Goshen, N. Y.

(Three-year-old trotters)

Run at Syracuse, N. Y., in 1926 and 1928; run at Lexington, Ky., in 1927 and 1929; run at Empire City Race Track, Yonkers, N. Y., in 1943.

Year	Winner	Driver	Best time	Value
1926	Guy McKinney	Nat Ray	2.04 3/4	\$73,451.32
1927	Iosola's Worthy	Marvin Childs	2.03 3/4	54,694.44
1928	Spencer	W. H. Leese	2.02 1/2	66,226.25
1929	Walter Dear	W. R. Cox	2.02 3/4	60,309.60
1930	Hanover's Bertha	Tom Berry	2.03	56,859.84
1931	Calumet Butler	R. McMahon	2.03 1/4	50,921.39
1932	The Marchioness	W. Caton	2.01 1/4	49,489.26
1933	Mary Reynolds	Ben White	2.03 3/4	40,459.88
1934	Lord Jim	H. M. Parshall	2.02 3/4	25,845.44
1935	Greyhound	Sep Palin	2.02 1/4	33,321.00
1936	Rosalind	Ben White	2.01 3/4	35,643.83
1937	Shirley Hanover	H. Thomas	2.01 1/2	37,912.58
1938	McLin Hanover	H. Thomas	2.02 1/4	37,962.37
1939	Peter Astra	H. M. Parshall	2.04 1/4	40,502.46
1940	Spencer Scott	F. Egan	2.02	43,685.45
1941	Bill Gallon	Lee Smith	2.05	38,729.86
1942	The Ambassador	Ben White	2.04	38,954.38
1943	Volo Song	Ben White	2.02 1/2	42,298.03
1944	Yankee Maid	H. Thomas	2.04	33,577.12
1945	Titan Hanover	H. Pownall	2.04	50,196.96
1946	Chestertown	Tom Berry	2.02 1/2	50,995.57
1947	Hoot Mon	Sep Palin	2.00	45,417.93

SUMMARY OF 1948 HAMBLETONIAN

Horse	Driver	Heats		Horse	Driver	Heats	
		1st	2d			1st	2d
Demon Hanover	Harrison R. Hoyt	1	1	Mighty Sister	Everett Osborn	7	6
Rollo	Tom Berry	2	2	Cynical Way	Will Fleming	10	7
Egan Hanover	Ralph Baldwin	3	3	aAdeline Hanover	Gib White	8	8
Jeff Hanover	Frank Safford	5	4	Rupert Hanover	John Simpson	9	11
aMadison Hanover	Ben White	4	10	Mercy Abbey	Harry Pyle	11	9
Judge Moore	Dell Miller	6	5				

Purse distribution—Demon Hanover, \$32,500.15; Rollo, \$11,818.24; Egan Hanover, \$7,090.94; Jeff Hanover, \$3,545.47; Madison Hanover, \$2,363.65; Judge Moore, \$1,772.73.

aWhite Stable entry. Times—2:03½, 2:02

Winner—Bay colt by Dean Hanover—Sorceress, by Volomite. Owned by Harrison R. Hoyt, Bethel, Conn.

WORLD HARNESS RACING RECORDS

(This compilation recognizes as record-holders those horses which have made the fastest time at their gait, age, and hitch, either against time or in a race at one mile.)

Trotting on Mile Track

	Time	Driver	Date	Where made
All-age—Greyhound.....	1.55½	S. F. Palin.....	Sept. 29, 1938	Lexington, Ky.
Yearling—Airdale.....	2.15¾	H. C. Moody.....	Oct. 2, 1912	Lexington, Ky.
2-year-old—Titan Hanover.....	2.00	Harry Pownall.....	Oct. 4, 1944	Lexington, Ky.
3-year-old—Titan Hanover.....	1.58	Harry Pownall.....	Sept. 7, 1945	DuQuoin, Ill.
4-year-old—Greyhound.....	1.57¼ (r)	S. F. Palin.....	Aug. 21, 1936	Springfield, Ill.
4-year-old—Spencer Scott.....	1.57¼	Fred Egan.....	Sept. 24, 1941	Lexington, Ky.
Lady driver—Dean Hanover.....	1.58½	Alma Sheppard.....	Sept. 24, 1937	Lexington, Ky.
To Wagon—Lou Dillon.....	2.00	C. K. G. Billings.....	Aug. 24, 1903	Readville, Mass.
To Wagon—Uhlan.....	2.00	C. K. G. Billings.....	Aug. 7, 1911	North Randall, Ohio
Team to Pole—Greyhound and Rosalind.....	1.58¼	S. F. Palin.....	Sept. 5, 1939	Indianapolis, Ind.
Team, Three Abreast—Calumet Dubuque, Mac Aubrey, Hollyrood Boris.....	2.10¼	T. F. Walsh.....	Aug. 14, 1937	Goshen, N. Y.
Team, Tandem—John R. McElwyn and Hollyrood Harrier.....	2.19¼	T. F. Walsh.....	Sept. 7, 1936	Rutland, Vt.
Four-in-Hand—Damiana, Belnut, Maud V., Nutspra.....	2.30	Not recorded.....	July 4, 1896	Chicago, Ill.
Under Saddle—Greyhound.....	2.01¾	Mrs. F. D. Johnson.....	Sept. 27, 1940	Lexington, Ky.
With Running Mate—Uhlan.....	1.54½	Chas. Tanner.....	Oct. 9, 1913	Lexington, Ky.

(r)Record made in race.

Trotting on Half-mile Track

	Time	Driver	Date	Where made
All-age—Greyhound.....	1.59¾	S. F. Palin.....	July 16, 1937	Goshen, N. Y.
Yearling—U. Forbes.....	2.21½	H. C. Moody.....	Sept. 18, 1913	Louisville, Ky.
2-year-old—Titan Hanover.....	2.03½ (r)	Harry Pownall.....	Sept. 19, 1940	Delaware, Ohio
3-year-old—Titan Hanover.....	2.01¾	Harry Pownall.....	Sept. 18, 1945	Delaware, Ohio
4-year-old—Doctor Spencer.....	2.01¼ (r)	H. Fitzpatrick.....	Sept. 19, 1946	Delaware, Ohio
To Wagon—Sweet Marie.....	2.08½	W. J. Andrews.....	Sept. 21, 1907	Allentown, Pa.
Team to Pole—Calumet Dubuque and Hollyrood Boris.....	2.06¾	T. F. Walsh.....	Aug. 19, 1937	Skowhegan, Me.
Team, Three Abreast—David Thornton, Hollyrood Boris, Capital Stock.....	2.22½	T. F. Walsh.....	July 2, 1937	Gorham, Maine
Under Saddle—Hollyrood Boris.....	2.09	Helen James.....	Sept. 17, 1936	Brockton, Mass.

(r)Record made in race.

Pacing on Mile Track

	Time	Driver	Date	Where made
All-age—Billy Direct.....	1.55	Vic Fleming.....	Sept. 28, 1938	Lexington, Ky.
Yearling—Royal Lady 2nd.....	2.14¾	O. M. Powell.....	Oct. 20, 1939	Indianapolis, Ind.
2-year-old—Knight Dream.....	2.00¾ (r)	F. E. Safford.....	Oct. 2, 1947	Lexington, Ky.
3-year-old—Chief Counsel.....	1.57¾	H. M. Marshall.....	Sept. 30, 1938	Lexington, Ky.
4-year-old—Billy Direct.....	1.55	Vic Fleming.....	Sept. 28, 1938	Lexington, Ky.
Lady Driver—Highland Scott.....	1.53¼	Mrs. E. R. Harriman.....	Aug. 22, 1929	Goshen, N. Y.
To Wagon—Dan Patch.....	1.57¼ (w)	M. E. McHenry.....	Oct. 27, 1903	Memphis, Tenn.
Team to Pole—Minor Heir and George Gano.....	2.02	E. J. McCarr.....	Oct. 1, 1912	Columbus, Ohio
Under Saddle—George Gano.....	2.10¾	M. Anderson.....	Sept. 2, 1915	Madison, Wis.
With Running Mate—Flying Jib.....	1.58¼	A. McDowell.....	Oct. 4, 1894	Chillicothe, Ohio

(r)Record made in race.

(w)With windshield.

Pacing on Half-mile Track

	Time	Driver	Date	Where made
All-age—Billy Direct.....	1.59¾	Wm. Fleming.....	Oct. 18, 1939	Altamont, N. Y.
Yearling—Lady Patch.....	2.18¼	O. M. Powell.....	1924	*
2-year-old—Adios.....	2.03¾ (r)	R. L. Parker.....	Sept. 16, 1942	Carthage, Ohio
3-year-old—Mc I Win.....	2.01¼ (r)	H. M. Marshall.....	Oct. 13, 1932	Raleigh, N. C.
4-year-old—King's Counsel.....	2.01 (r)	H. Fitzpatrick.....	Aug. 18, 1944	Jefferson, Ohio
Direct Express.....	2.01 (r)	P. W. Vineyard.....	Aug. 15, 1947	Westbury, N. Y.
To Wagon—Dan Patch.....	2.05 (w)	H. C. Hersey.....	Sept. 21, 1905	Allentown, Pa.
Team to Pole—Billy Direct and The Widower.....	2.04¼	Chas. Fleming.....	Oct. 12, 1939	Altamont, N. Y.
Under Saddle—Zombro Hanover.....	2.06¾	J. Weipert.....	Sept. 21, 1935	Newark, N. J.

*Data unavailable.

(r)Record made in race.

(w)With windshield.

WORLD RECORDS MADE IN 1948

Trotting

Dist.	Track	Made by	Place	Date	Time
9/16 mi.	Mile	Moses	Collinsville, Ill.	July 24	1.06 2/5
5/8 mi.	Mile	Peaceful Abbey	Collinsville, Ill.	June 4	1.14
5/8 mi.	1/2 Mile	Ragweed Bob	Toledo	July 28	1.16
1/16 mi.	Mile	Rodney	Santa Anita, Calif.	April 23	2.09 2/5
1/4 mi.	Mile	Rodney	Santa Anita, Calif.	May 8	2.31 3/5
mi.	1/2 Mile	Proximity	Westbury, N. Y.	Aug. 20	2.17

Pacing

Dist.	Track	Made by	Place	Date	Time
9/16 mi.	Mile	Harold Abbe	Collinsville, Ill.	July 11	1.05 1/5
1/16 mi.	1/2 Mile	Jimmy Creed	Chicago	July 9	2.09 2/5
1/4 mi.	Mile	Dr. Stanton	Santa Anita, Calif.	May 15	2.30 2/5
1/2 mi.	1/2 Mile	Dr. Stanton	Westbury, N. Y.	Aug. 13	3.11 3/5
mi.	1/2 Mile	Goose Bay	Westbury, N. Y.	Sept. 10	4.17 3/5

1948 CHAMPIONS

HORSE OF THE YEAR—Rodney

LEADING MONEY-WINNER—Egan Hanover (\$67,567)

Trotters

(Based on performances at one mile)

Mile Track

	Best time
2-YEAR-OLD—Miss Tilly	2.04 2/5
3-YEAR-OLD—Demon Hanover	2.00 1/5
4-YEAR-OLD—Rodney	1.58
AGED—Full Bloom	1.58 4/5

Half-Mile Track

2-YEAR-OLD—Bangaway	2.09 2/5
3-YEAR-OLD—Demon Hanover	2.04
4-YEAR-OLD—Fedor	2.04 3/5
AGED—Proximity	2.02 1/5

Pacers

(Based on performances at one mile)

Mile Track

	Best time
2-YEAR-OLD—Good Time	2.02 1/5
3-YEAR-OLD—Knight Dream	1.59
4-YEAR-OLD—Poplar Byrd	1.59 3/5
AGED—Grattan McKlyo	1.59

Half-Mile Track

2-YEAR-OLD—Golden Mite	2.06
3-YEAR-OLD—Knight Dream	2.01 3/5
4-YEAR-OLD—Goose Bay	2.02 1/5
AGED—Jimmy Creed	2.01 2/5

STAKE WINNERS IN 1948

Trotting

Aged

	Best time	Value
AMERICAN CHAMPIONSHIP— Sidney Hanover	2.03 2/5	\$25,000.00
GOLDEN WEST—Rodney	2.31 3/5	50,000.00
ROOSEVELT 2-MILE—Proximity	4.17	40,000.00

3-Year-Olds

	Best time	Value
CHAMPIONSHIP STALLION— Egan Hanover	2.03 3/5	7,980.00
COACHING CLUB OAKS—Adeline Hanover	2.08 1/5	14,311.00
HAMBLETONIAN—Demon Hanover	2.02	59,941.18
HANOVER SHOE FILLY—Volup- tuous	2.05	10,884.00
HORSEMAN FUTURITY—Egan Hanover	2.02 3/5	12,130.12
KENTUCKY FUTURITY—Egan Hanover	2.03 2/5	50,071.00
READING FUTURITY—Snappy Ann	2.09	8,380.57
REVIEW FUTURITY—Egan Han- over	2.02 4/5	11,039.00
TROTting CLUB—Egan Hanover	2.01 2/5	17,370.00

2-Year-Olds

	Best time	Value
CASTLETON FARM—Miss Tilly	2.05	25,446.10
GREYHOUND—Miss Tilly	2.05 3/5	20,650.15
HANOVER SHOE FILLY—Martha Doyle	2.12	11,826.00
HORSEMAN—Miss Tilly	2.06	34,246.00

Pacing

Aged

	Best time	Value
GOLDEN WEST—Indian Land	2.33	\$50,000.00
NASSAU—Goose Bay	4.17 3/5	40,000.00
NATIONAL DERBY—Goose Bay	2.03	25,000.00

3-Year-Olds

	Best time	Value
HANOVER SHOE FILLY—Marion Direct	2.11	9,619.00
LITTLE BROWN JUG—Knight Dream	2.07 1/5	47,528.58
REVIEW FUTURITY—Knight Dream	2.01	8,521.00
TROTting CLUB—Knight Dream	2.01 4/5	9,120.00
VILLAGE FARM (1st div.)—F. J. Hal	2.07 2/5	7,500.00
VILLAGE FARM (2d. div.)—Knight Dream	2.03 2/5	7,500.00

2-Year-Olds

	Best time	Value
FOX—Good Time	2.03 2/5	32,159.37
GEERS—White Mt. Boy	2.05	12,645.00
HANOVER SHOE FILLY—Miss Morris Chief	2.07	10,273.00
LITTLE PAT—Good Time	2.04	15,727.13
MCMAHON MEMORIAL—Good Time	2.03 2/5	19,871.10
VILLAGE FARM (1st div.)—Otis Hanover	2.10	10,743.75
VILLAGE FARM (2d div.)—Oli- vette Hanover	2.10 1/5	10,743.75

Trot Betting Mark Established

A crowd of 27,913 wagered a world-record total of \$1,067,389 at the harness racing

meeting at Roosevelt Raceway, Westbury, N. Y., on Sept. 11, 1948.

FOOTBALL

THE PASTIME of kicking a ball around goes back beyond the limits of recorded history. Ancient savage tribes played football of a primitive kind. There was a ball-kicking game played by Athenians and Spartans and Corinthians 2500 years ago and the Greeks had a name for it: *Episkuros*. The Romans had a somewhat similar game called *Harpastum* and are supposed to have carried the game with them when they invaded the British Isles in the First Century, B. C.

Undoubtedly the game known in the United States as Football traces directly to the English game of Rugby, though the modifications have been many and rather sweeping in some directions. There was informal football on our college lawns well over a century ago and an annual Freshman-Sophomore series of "scrimmages" began at Yale in 1840. But the first formal intercollegiate football game in this country was the Princeton-Rutgers contest played at New Brunswick, N. J., on Nov. 6, 1869, with Rutgers winning by 6 goals to 4. Columbia took to the intercollegiate football field in 1870 and Yale in 1872. Soon many colleges were playing football in the autumn.

In those old days games were played

with twenty-five, twenty, fifteen or eleven men on a side by mutual agreement. In 1880 there was a football convention at which Walter Camp of Yale persuaded the delegates to agree to a rule calling for eleven players on a side. In 1882 there was adopted the rule requiring the offensive team to make 5 yards in three downs or surrender the ball to its opponents. The game grew so rough that it was attacked as brutal by many critics and some colleges abandoned the sport. Conditions were so bad in 1906 that President Theodore Roosevelt, an enthusiast for all sports, called a meeting of Yale, Harvard and Princeton representatives at the White House in the hope of reforming and improving the game. The outcome was that the game, with the forward pass introduced and some other modifications of the rules inserted, became faster and cleaner and gradually grew to the tremendous popularity it enjoys today.

Professional football, now firmly established, is an outgrowth of intercollegiate football. The first professional game was played in 1895 at Latrobe, Pa. The National Football League was founded in 1921. The All-America Conference went into action in 1946.

Intercollegiate Statistics

Source: *Official NCAA Football Guide*; published by A. S. Barnes & Co.

RECORD OF ANNUAL POSTSEASON GAMES

Rose Bowl

Pasadena, Calif.

1902	Michigan 49, Stanford 0
1916	Washington State 14, Brown 0
1917	Oregon 14, Pennsylvania 0
1918	Mare Island Marines 19, Camp Lewis 7
1919	Great Lakes 17, Mare Island Marines 0
1920	Harvard 7, Oregon 6
1921	California 28, Ohio State 0
1922	Washington & Jefferson 0, California 0
1923	Southern California 14, Penn State 3
1924	Navy 14, Washington 14
1925	Notre Dame 27, Stanford 10
1926	Alabama 20, Washington 19
1927	Alabama 7, Stanford 7
1928	Stanford 7, Pittsburgh 6
1929	Georgia Tech 8, California 7
1930	Southern California 47, Pittsburgh 14
1931	Alabama 24, Washington State 0

*Played at Durham, N. C.

1932	Southern California 21, Tulane 12
1933	Southern California 35, Pittsburgh 0
1934	Columbia 7, Stanford 0
1935	Alabama 29, Stanford 13
1936	Stanford 7, Southern Methodist 0
1937	Pittsburgh 21, Washington 0
1938	California 13, Alabama 0
1939	Southern California 7, Duke 3
1940	Southern California 14, Tennessee 0
1941	Stanford 21, Nebraska 13
1942	Oregon State 20, Duke 16*
1943	Georgia 9, U. C. L. A. 0
1944	Southern California 29, Washington 0
1945	Southern California 25, Tennessee 0
1946	Alabama 34, Southern California 14
1947	Illinois 45, U. C. L. A. 14
1948	Michigan 49, Southern California 0

Rutgers Plays 600th Game

The football game between Rutgers and N. Y. U. on Nov. 13, 1948, was the 600th for the New Jersey college. Rutgers won, 40 to 0.

Andover Victor Over Exeter

Phillips Andover Academy defeated Exeter, 28 to 7, in the 1948 renewal of the oldest schoolboy football rivalry in the U. S.

Orange Bowl (Miami, Fla.)

1933	Miami 7, Manhattan 0
1934	Duquesne 33, Miami 7
1935	Bucknell 26, Miami 0
1936	Catholic University 20, Mississippi 19
1937	Duquesne 13, Mississippi State 12
1938	Alabama Poly. 6, Michigan State 0
1939	Tennessee 17, Oklahoma 0
1940	Georgia Tech 21, Missouri 7
1941	Mississippi State 14, Georgetown 7
1942	Georgia 40, Texas Christian 26
1943	Alabama 37, Boston College 21
1944	Louisiana State 19, Texas A & M 14
1945	Tulsa 26, Georgia Tech 12
1946	Miami 13, Holy Cross 6
1947	Rice 8, Tennessee 0
1948	Georgia Tech 20, Kansas 14

Cotton Bowl (Dallas, Tex.)

1937	Texas Christian 16, Marquette 6
1938	Rice 28, Colorado 14
1939	St. Mary's (Calif.) 20, Texas Tech 13
1940	Clemson 6, Boston College 3
1941	Texas A & M 13, Fordham 12
1942	Alabama 29, Texas A & M 21
1943	Texas 14, Georgia Tech 7
1944	Randolph Field 7, Texas 7
1945	Oklahoma A & M 34, Texas Christian 0
1946	Texas 40, Missouri 27
1947	Louisiana State 0, Arkansas 0
1948	Southern Methodist 13, Penn State 13

Sugar Bowl (New Orleans, La.)

1935	Tulane 20, Temple 14
1936	Texas Christian 3, Louisiana State 2
1937	Santa Clara 21, Louisiana State 14
1938	Santa Clara 6, Louisiana State 0
1939	Texas Christian 15, Carnegie Tech 7
1940	Texas A & M 14, Tulane 13
1941	Boston College 19, Tennessee 13
1942	Fordham 2, Missouri 0
1943	Tennessee 14, Tulsa 7
1944	Georgia Tech 20, Tulsa 18
1945	Duke 29, Alabama 26
1946	Oklahoma A & M 33, St. Mary's (Calif.) 13
1947	Georgia 20, North Carolina 10
1948	Texas 27, Alabama 7

1948 CONFERENCE CHAMPIONS

EASTERN IVY LEAGUE—Cornell
BIG NINE—Michigan
PACIFIC COAST—California and Oregon (tie)
SOUTHEASTERN—Georgia
SOUTHWEST—Southern Methodist
BIG SEVEN—Oklahoma
BIG SIX—Utah
MISSOURI VALLEY—Oklahoma A. & M.
MIDWEST—Ripon
MASON-DIXON—Johns Hopkins
CANADIAN—Toronto

Famous Series Records

Until 1883, when scoring by points was generally adopted, scores were kept by goals, touchdowns and safeties. Earlier results of Big Three games: 1873—Prin. 3, Yale 0; Harv. 4G, 2T, Yale 0; 1876—Yale 1G, Harv. 2T; Yale 10, Prin. 0; 1877—Yale 0, Prin. 0; Harv. 1G, 1T, Prin. 1T (Spring); Prin. 1G, 1T, Harv. 2T (Fall); 1878—Yale 1G, 7S, Harv. 13S; Prin. 1, Yale 0; Prin. 1T, Harv. 0; 1879—Harv. 4S, Yale 2S; Yale 0, Prin. 0; Prin. 1G, Harv. 0; 1880—Yale 1G, 1T, 2S, Harv. 9S; Yale 0, Prin. 0; Prin. 2G, 2T, Harv. 1G, 1T; 1881—Harv. 4S, Yale 0; Yale 0, Prin. 0; Harv. 0, Prin. 0; 1882—Yale 1G, 3T, Harv. 2S; Yale 2, Prin. 1; Harv. 1G, 1T, Prin. 1G.

Year	Harv. Yale	Yale Prin.	Harv. Prin.	Army-Navy	Year	Harv. Yale	Yale Prin.	Harv. Prin.	Army-Navy
1883	2 23	6 0	7 26	.. ..	1915	41 0	13 7	10 6	14 0
1884	0 52	0 0	6 36	.. ..	1916	3 6	10 0	3 0	15 7
1885	.. ..	5 6	.. ..	.. ..	1919	10 3	6 13	10 10	0 6
1886	4 29	0 0	0 12	.. ..	1920	9 0	0 20	14 14	0 7
1887	8 17	12 0	12 0	.. ..	1921	10 3	13 7	3 10	0 7
1888	.. ..	10 0	6 18	.. ..	1922	10 3	0 3	3 10	17 14
1889	0 6	0 10	15 41	.. ..	1923	0 13	27 0	5 0	0 0
1890	12 6	32 0	.. ..	0 24	1924	6 19	10 0	0 34	12 0
1891	0 10	19 0	.. ..	32 16	1925	0 0	12 25	0 36	10 3
1892	0 6	12 0	.. ..	4 12	1926	7 12	7 10	0 12	21 21
1893	0 6	0 6	.. ..	4 6	1927	0 14	14 6	.. ..	14 9
1894	4 12	24 0	.. ..	.. ..	1928	17 0	2 12	.. ..	.. ..
1895	.. ..	20 10	4 12	.. ..	1929	10 6	13 0	.. ..	.. ..
1896	.. ..	6 24	0 12	.. ..	1930	13 0	10 7	.. ..	6 0
1897	0 0	6 0	.. ..	.. ..	1931	0 3	51 14	.. ..	17 7
1898	17 0	0 6	.. ..	.. ..	1932	0 19	7 7	.. ..	20 0
1899	0 0	10 11	.. ..	.. ..	1933	19 6	2 27	.. ..	12 7
1900	0 28	29 5	.. ..	7 11	1934	0 14	7 0	0 19	0 3
1901	22 0	12 0	.. ..	11 5	1935	7 14	7 38	0 35	28 6
1902	0 23	12 5	.. ..	22 8	1936	13 14	26 23	14 14	0 7
1903	0 16	6 11	.. ..	40 5	1937	13 6	26 0	34 6	6 0
1904	0 12	12 0	.. ..	11 0	1938	7 0	7 20	26 7	14 7
1905	0 6	23 4	.. ..	6 6	1939	7 20	7 13	6 9	0 10
1906	0 6	0 0	.. ..	0 10	1940	28 0	7 10	0 0	0 14
1907	0 12	12 10	.. ..	0 6	1941	14 0	6 20	6 4	6 14
1908	4 0	11 6	.. ..	6 4	1942	3 7	13 6	19 14	0 14
1909	0 8	17 0	.. ..	.. ..	1943	.. ..	27 6	.. ..	0 13
1910	0 0	5 3	.. ..	0 3	1944	.. ..	.. ..	.. ..	23 7
1911	0 0	3 6	6 8	0 3	1945	0 28	20 14	.. ..	32 13
1912	20 0	6 6	16 6	0 6	1946	14 27	30 2	13 12	21 18
1913	15 5	3 3	3 0	22 9	1947	21 31	0 17	7 33	21 0
1914	36 0	19 14	20 0	20 0	1948	20 7	14 20	7 47	21 21

LOOK'S 1948 ALL-AMERICA TEAMS

Selected by Grantland Rice, assisted by the Football Writers Association of America

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FIRST TEAM

END	D. Rifenburg, Michigan
END	A. Weiner, N. Carolina
TACKLE	L. Nomellini, Minnesota
TACKLE	L. Hart, Notre Dame
GUARD	W. Healy, Georgia Tech.
GUARD	J. Henry, Army
CENTER	C. Bednarik, Penn.
BACK	J. Rauch, Georgia
BACK	D. Walker, So. Methodist
BACK	E. Sitko, Notre Dame
BACK	J. Jensen, California

SECOND TEAM

D. Armstrong, Dartmouth
W. Huey, Michigan State
L. Szafaryn, No. Carolina
A. Wistert, Michigan
P. Burris, Oklahoma
M. Wendell, Notre Dame
W. Yeoman, Army
N. Van Brocklin, Oregon
C. Justice, No. Carolina
A. Murakowski, N'west'n
F. Rogel, Penn State

THIRD TEAM

D. Garza, Oregon
J. Martin, Notre Dame
C. Fritz, Missouri
W. Koch, Princeton
D. Tomasi, Michigan
V. Sterling, Santa Clara
C. Tonnemaker, Minn.
A. Galiffa, Army
E. Petchel, Penn State
R. Stuart, Army State
J. Cloud, Wm. & Mary

Intercollegiate Team Records, 1948

ALABAMA

14—Tulane	21
14—Vanderbilt	14
48—Duquesne	6
6—Tennessee	21
10—Miss. State	7
0—Georgia	35
27—Miss. Southern	0
14—Georgia Tech	12
6—Louisiana State	26
34—Florida	28

AMHERST

26—Rochester	6
26—Coast Guard	12
27—Bowdoin	19
27—Colby	14
0—Wesleyan	27
14—Tufts	13
0—Trinity	46
13—Williams	7

ARIZONA

14—San Diego State	6
14—Utah	47
20—Hardin-Simmons	14
7—Mich. State	61
0—Texas Tech	31
33—Toupe T.	21
14—New Mexico	6
14—Texas Mines	25
14—Iowa State	7
24—Marquette	14

ARKANSAS

40—Abilene Christian	6
46—East Texas	7
27—T. C. U.	14
7—Baylor	23
6—Texas	14
28—Texas A. & M.	6
6—Rice	25
12—So. Methodist	14
55—Tulsa	18
0—Wm. & Mary	9

ARMY

28—Villanova	0
54—Lafayette	7
26—Illinois	21
20—Harvard	7
27—Cornell	6
49—Virginia Tech	7
43—Stanford	0
26—Pennsylvania	20
21—Navy	21

AUBURN

20—Miss. Southern	14
13—Louisiana Tech	13
9—Florida	16
0—Georgia Tech	27
6—Tulane	21
0—Vanderbilt	47
0—Miss. State	20
14—Georgia	42
6—Clemson	7

BATES

6—Massachusetts	7
7—Middlebury	20
7—Tufts	28
18—Northeastern	6
31—Maine	0
12—Bowdoin	13
7—Colby	0

BAYLOR

42—Tulsa	19
7—Miss. State	7
23—Arkansas	7
13—Texas Tech	0
20—Texas A. & M.	14
6—T. C. U.	3
10—Texas	13
13—Tulane	35
6—So. Methodist	13
7—Rice	7

BOSTON COLLEGE

26—Wake Forest	9
13—Georgetown	6
7—St. Bonaventure	7
20—Villanova	13
13—Mississippi	32
19—Clemson	26
7—Wm. & Mary	14
19—St. Mary's (Cal.)	7
21—Holy Cross	20

BOSTON U.

0—Muhlenberg	27
13—Scranton	0
14—Colgate	13
13—Temple	7
28—N. Y. U.	7
12—Syracuse	7
33—Fordham	7
14—Iowa	34

BOWDOIN

28—Tufts	7
0—Wesleyan	13
19—Amherst	27
34—Williams	0
28—Colby	0
13—Bates	12
6—Maine	7

BROOKLYN

24—New Haven T.	0
21—Bridgeport	7
7—N. Y. U.	21
20—Wagner	0
33—Northeastern	0
40—Hofstra	0
45—C. C. N. Y.	7
31—Alfred	7
13—R. P. I.	47

BROWN

13—Yale	28
23—Princeton	20
33—Rhode Island	0
14—Holy Cross	6
49—Connecticut	6
20—Rutgers	6
36—Western Reserve	0
19—Harvard	30
35—Colgate	7

BUCKNELL

29—Alfred	6
0—Penn State	35
0—Gettysburg	7
0—Delaware	13
7—Lafayette	19
0—Temple	20
13—W. and J.	18
13—Buffalo	47
14—Muhlenberg	44

BUFFALO

0—Colgate	25
39—Hobart	0
39—R. P. I.	21
48—Alfred	0
41—W. and J.	14
48—Louisville	19
13—Niagara	13
47—Bucknell	13

*CALIFORNIA

41—Santa Clara	19
21—Navy	7
20—St. Mary's (Cal.)	0
40—Wisconsin	14
42—Oregon State	0
21—Washington	0
7—So. California	7
28—U. C. L. A.	13
44—Wash. State	14
7—Stanford	6

CANISIUS

61—St. Francis	0
21—Youngstown	33
19—St. Vincent	0
30—Fordham	21
19—Niagara	0
32—Scranton	7
14—St. Bonaventure	6
26—Toledo	21
7—Marshall	7

CARNEGIE TECH

6—Washington (O.)	14
7—Marietta	21
0—F. and M.	19
20—Case	26
7—W. and J.	19
13—Oberlin	26
0—Lehigh	20
7—Grove City	0

CATHOLIC U.

14—Patuxent N. A. B.	0
6—West. Maryland	2
13—Randolph-Macon	20
6—Johns Hopkins	34
0—Mt. St. Mary's	13
0—Newport News A. S.	32
6—Washington Coll.	7
7—Lock Haven T.	48

C. C. N. Y.

7—Susquehanna	13
6—Rider	49
7—Panzer	12
13—Lowell Textile	0
19—Wagner	19
33—New Britain	12
7—Brooklyn	45
47—Hofstra	6

CHATTANOOGA

7—Georgia	14
18—Tennessee Tech	7
0—Tennessee	26
35—Presbyterian	0
0—N. C. State	7
27—Evansville	0
7—Mississippi	34
0—Miami (Fla.)	19
21—Dayton	6

CINCINNATI

7—Hardin-Simmons	7
7—Xavier	13
18—Ohio U.	13
0—Miss. State	27
16—Butler	7
7—Kentucky	28
6—Miami (Fla.)	36
26—Western Reserve	13
0—Tulane	6
19—Miami (Ohio)	43

CITADEL

0—Presbyterian	7
14—Newberry	14
0—Davidson	14
0—Furman	10
19—Erskine	0
0—Geo. Washington	14
6—V. M. I.	34
0—Georgia Tech.	54

*CLEMSON

53—Presbyterian	0
6—N. C. State	0
21—Miss. State	7
13—So. Carolina	7
26—Boston College	19
41—Furman	0
21—Wake Forest	14
42—Duquesne	0
7—Auburn	6

*Unbeaten. †Unbeaten but tied.

COLBY		DELAWARE		FORDHAM		HAMILTON	
Amer. Int'l	0	7-Penn. M. C.	13	14-Lafayette	53	0-Allegheny	19
Tufts	21	0-Maryland	21	48-Kings Point	0	0-Middlebury	13
Northeastern	0	19-West Chester T.	0	21-Canisius	30	6-Oberlin	28
Amherst	27	7-Bucknell	0	41-St. Francis	0	0-Haverford	13
Bowdoin	28	12-Muhlenberg	0	0-Georgetown	35	13-Hobart	0
Maine	23	33-Gettysburg	27	7-Boston U.	13	19-Earham	12
Coast Guard	19	14-Rollins	13	6-Holy Cross	13	7-Union	25
Bates	7	14-Wash. & Lee	21	19-Rutgers	28		
				26-N. Y. U.	0		
COLGATE		DENVER		F. AND M.		HARVARD	
Buffalo	0	33-Colorado Mines	0	13-Lehigh	12	33-Columbia	24
Rutgers	34	0-Kansas	40	6-Johns Hopkins	7	6-Cornell	40
Boston U.	14	7-Okla. A. & M.	27	12-Dickinson	6	7-Army	20
Dartmouth	41	10-Columbia A. & M.	14	19-Carnegie Tech	0	7-Dartmouth	14
Holy Cross	13	0-Utah	17	0-Albright	0	20-Holy Cross	13
Penn. State	32	22-St. Mary's (Cal.)	33	39-Swarthmore	20	7-Princeton	47
Cornell	14	10-Georgetown	10	6-Ursinus	20	30-Brown	15
Syracuse	13	30-Detroit	27	7-Muhlenberg	40	20-Yale	7
Brown	35	41-Utah State	6	6-Gettysburg	39		
		13-Wyoming	0				
COLORADO		DETROIT		FURMAN		HAVERFORD	
New Mexico	9	36-Toledo	0	10-Wash. & Lee	7	26-Ursinus	12
Kansas	40	34-Marquette	6	0-South Carolina	7	7-Drexel	6
Nebraska	6	40-San Francisco	7	0-Richmond	7	28-Hamilton	0
Iowa State	18	0-Miami (Fla.)	6	7-Wofford	7	21-Juniata	34
Kansas State	7	13-Wayne	0	10-Citadel	0	14-Penn. M. C.	33
Utah	14	6-Villanova	27	14-Florida	39	21-Susquehanna	7
Utah State	14	27-Denver	30	0-Clemson	41	28-Swarthmore	28
Missouri	27	27-St. Louis	14	0-Georgia	33		
Colorado A. & M.	29	26-Tulsa	22	0-Davidson	7		
COLORADO A. & M.		DICKINSON		GEORGIA		HOBART	
Colorado College	6	13-Thiel	6	14-Chattanooga	7	13-Middlebury	31
New Mexico A. & M.	6	6-Grove City	6	14-No. Carolina	21	0-Buffalo	39
Utah State	7	6-F. and M.	12	35-Kentucky	12	0-St. Lawrence	14
Denver	10	24-Ursinus	0	22-Louisiana State	0	0-Trinity	52
Wyoming	20	6-Juniata	23	42-Miami (Fla.)	21	0-Union	25
Drake	31	7-Allegheny	14	35-Alabama	0	0-Hamilton	13
Colorado Mines	0	14-Drexel	12	20-Florida	12	24-Kenyon	0
Utah	12	6-Johns Hopkins	9	42-Auburn	14	24-Sampson	9
Brigham Young	0			33-Furman	0		
Colorado	25			21-Georgia Tech	13		
COLUMBIA		DRAKE		GEORGIA TECH		HOFSTRA	
Rutgers	6	47-So. Dakota State	0	13-Vanderbilt	0	13-Wagner	13
Harvard	33	14-St. Louis	0	13-Tulane	7	0-Lebanon Valley	41
Yale	28	0-Iowa Teachers	6	27-Wash. & Lee	0	6-Moravian	21
Pennsylvania	20	20-Wichita	21	27-Auburn	0	7-Kings Point	28
Princeton	16	17-Bradley	14	42-Florida	7	0-Brooklyn	40
Cornell	20	31-Colorado A. & M.	29	19-Duke	7	6-Bridgeport	6
Dartmouth	26	43-Emporia Teachers	20	6-Tennessee	13	6-C. C. N. Y.	47
Navy	0	0-Iowa State	2	12-Alabama	14	6-Adelphi	7
Syracuse	28	13-New Mexico	0	54-Citadel	0		
CONNECTICUT		DUKE		GEORGETOWN		HOLY CROSS	
Yale	7	0-N. C. State	0	13-Vanderbilt	0	18-Georgetown	7
Springfield	10	7-Tennessee	7	13-Tulane	7	33-Syracuse	7
Maine	6	28-Navy	7	27-Wash. & Lee	0	6-Dartmouth	19
Brown	49	13-Maryland	12	13-Tulsa	7	6-Brown	14
Champlain	7	7-Virginia Tech.	0	42-Florida	7	13-Colgate	14
Rhode Island	7	7-Georgia Tech.	0	19-Duke	7	13-Harvard	20
New Hampshire	20	20-Wake Forest	27	6-Tennessee	13	16-Duquesne	13
Kent State	42	62-Geo. Washington	0	12-Alabama	14	13-Fordham	6
		0-No. Carolina	20	54-Citadel	0	13-Temple	7
				13-Georgia	21	20-Boston College	21
CORNELL		DUQUESNE		GEORGETOWN		IDAHO	
N. Y. U.	6	34-W. Va. Wesleyan	6	7-Holy Cross	18	12-Oregon State	27
Navy	7	15-Alliama	7	6-Boston College	13	6-Utah	21
Harvard	6	0-Villanova	46	13-Tulsa	7	12-U. C. L. A.	28
Syracuse	6	0-Alabama	48	35-Fordham	0	8-Oregon	15
Army	27	15-Wake Forest	14	10-Denver	10	39-Montana	9
Columbia	13	7-Ohio U.	14	13-N. Y. U.	13	14-Wash. State	19
Colgate	6	13-Holy Cross	16	7-Villanova	36	28-Monmouth	0
Dartmouth	26	6-N. C. State	20	7-Geo. Washington	13	28-Portland	0
Pennsylvania	14	0-Clemson	42			7-Washington	34
DARTMOUTH		FLORIDA		GEO. WASHINGTON		ILLINOIS	
Pennsylvania	26	0-Mississippi	14	13-Wake Forest	27	10-Kansas State	9
Holy Cross	6	28-Tulsa	14	13-Virginia Tech.	0	16-Wisconsin	20
Colgate	16	16-Auburn	9	6-V. M. I.	26	21-Army	26
Yale	14	41-Rollins	12	20-Virginia	12	0-Minnesota	6
Columbia	14	7-Georgia Tech.	42	0-Kansas	12	10-Purdue	6
Cornell	27	39-Furman	14	0-Maryland	47	20-Michigan	28
Erinceton	13	12-Georgia	30	14-Lafayette	33	14-Iowa	9
		15-Kentucky	24	14-Citadel	0	7-Ohio State	34
		27-Miami (Fla.)	13	0-Duke	62	7-Northwestern	28
		28-Alabama	34	13-Georgetown	7		
				GETTYSBURG		INDIANA	
				26-Albright	6	35-Wisconsin	7
				28-Drexel	0	7-Iowa	9
				13-Bucknell	17	6-T. C. U.	7
				13-Lehigh	14	0-Michigan State	17
				20-Muhlenberg	32	10-Pittsburg	21
				27-West. Maryland	0	7-Minnesota	38
				27-Delaware	33	6-Notre Dame	42
				7-St. Lawrence	7	0-Michigan	54
				39-F. and M.	6	0-Purdue	39

Team Records—(cont.)

IOWA

14—Marquette	12
0—Indiana	7
14—Ohio State	7
13—Purdue	20
12—Notre Dame	27
19—Wisconsin	13
0—Illinois	14
21—Minnesota	28
34—Boston U.	14

IOWA STATE

27—Iowa State Tea.	7
15—Nebraska	19
20—Kansas State	0
7—Kansas	20
18—Colorado	7
7—Missouri	49
6—Oklahoma	33
2—Drake	0
7—Mich. State	48
7—Arizona	14

JOHNS HOPKINS

7—F. and M.	6
20—Washington Coll.	0
7—Penn. M. G.	12
34—Catholic U.	6
22—Drexel	0
19—Swarthmore	7
9—Dickinson	6
7—West. Maryland	6

KANSAS

13—T. C. U.	14
40—Denver	0
40—Colorado	7
20—Iowa State	7
12—Geo. Washington	0
27—Nebraska	7
13—Okla. A. & M.	7
20—Kansas State	14
7—Oklahoma	60
7—Missouri	21

KANSAS STATE

0—Illinois	40
0—Iowa State	20
37—Arkansas State	42
0—Oklahoma	6
7—Colorado	51
7—Missouri	49
0—Nebraska	32
14—Kansas	20
6—Okla. A. & M.	42
7—St. Louis	21

KENTUCKY

48—Xavier	7
7—Mississippi	20
12—Georgia	35
7—Vanderbilt	26
25—Marquette	0
28—Cincinnati	7
13—Villanova	13
34—Florida	15
0—Tennessee	0
25—Miami (Fla.)	5

LAFAYETTE

53—Fordham	14
7—Army	54
56—W. and J.	15
46—Muhlenberg	13
19—Bucknell	7
33—Geo. Washington	14
13—Rutgers	34
27—Ohio Wesleyan	7
23—Lehigh	13

LEBANON VALLEY

7—Temple	7
25—Mt. St. Mary's	0
41—Hofstra	0
0—Scranton	26
14—Moravian	6
13—Albright	19
28—Juniata	8
6—West. Maryland	13
19—Upsala	13

LEHIGH

12—F. and M.	13
7—Case	18
45—Drexel	0
14—Gettysburg	13
6—Rutgers	20
20—N. Y. U.	21
35—Muhlenberg	20
20—Carnegie Tech	0
13—Lafayette	23

LOUISIANA STATE

0—Texas	33
26—Rice	13
14—Texas A. & M.	13
0—Georgia	22
7—No. Carolina	34
19—Mississippi	48
7—Vanderbilt	48
0—Miss. State	7
26—Alabama	6
0—Tulane	46

MAINE

13—Rhode Island	7
19—Northeastern	6
6—New Hampshire	27
6—Connecticut	34
0—Bates	31
21—Colby	0
7—Bowdoin	6

MARQUETTE

12—Iowa	14
6—Detroit	34
47—St. Louis	7
7—Pittsburgh	21
0—Kentucky	25
9—Purdue	14
0—Mich. State	47
0—Wisconsin	26
32—So. Dakota	0
14—Arizona	24

MARYLAND

19—Richmond	0
21—Delaware	0
28—Virginia Tech	0
12—Duke	13
47—Geo. Washington	0
27—Miami (Fla.)	13
19—So. Carolina	7
20—No. Carolina	49
0—Vanderbilt	34
14—West Virginia	16

MASSACHUSETTS

7—Bates	6
19—Norwich	27
26—Worcester	7
12—Rhode Island	19
14—Dovens	20
33—Vermont	0
0—Springfield	31
13—Tufts	13

MIAMI (Fla.)

25—Rollins	0
10—Villanova	19
6—Detroit	0
21—Georgia	42
13—Maryland	27
36—Cincinnati	6
19—Chattanooga	0
13—Florida	27
5—Kentucky	25

*MICHIGAN

13—Mich. State	7
14—Oregon	0
0—Purdue	0
28—Northwestern	0
27—Minnesota	14
28—Illinois	20
35—Navy	0
54—Indiana	0
13—Ohio State	3

MICHIGAN STATE

7—Michigan	13
68—Hawaii	21
7—Notre Dame	26
11—Arizona	7
14—Penn State	14
46—Oregon State	21
47—Marquette	0
48—Iowa State	7
40—Wash. State	0
21—Santa Clara	21

MIDDLEBURY

31—Hobart	13
20—Bates	7
13—Hamilton	0
32—Coast Guard	0
24—Trinity	13
0—Norwich	0
7—Union	14
13—Vermont	12

MINNESOTA

20—Washington	0
39—Nebraska	13
16—Northwestern	19
6—Illinois	0
14—Michigan	27
30—Indiana	0
34—Purdue	0
0—Iowa	21
16—Wisconsin	0

MISSISSIPPI

14—Florida	0
20—Kentucky	7
20—Vanderbilt	7
7—Tulane	20
32—Boston College	13
49—Louisiana State	19
34—Chattanooga	7
16—Tennessee	13
34—Miss. State	7

MISS. STATE

21—Tennessee	6
7—Baylor	7
7—Clemson	21
0—Cincinnati	0
7—Alabama	10
0—Tulane	9
20—Auburn	0
7—Louisiana State	0
7—Mississippi	34

MISSOURI

7—Ohio State	21
60—St. Louis	7
20—So. Methodist	14
35—Navy	14
49—Iowa State	7
49—Kansas State	7
7—Oklahoma	41
27—Colorado	13
33—Nebraska	6
21—Kansas	7

MUHLENBERG

27—Boston U.	0
19—Youngstown	0
18—Scranton	0
13—Lafayette	14
32—Gettysburg	46
0—Delaware	20
20—Lehigh	35
40—F. and M.	7
44—Bucknell	14
13—Albright	7

NAVY

7—California	21
7—Cornell	13
7—Duke	0
14—Missouri	28
14—Pennsylvania	35
7—Notre Dame	20
0—Michigan	41
0—Columbia	35
21—Army	21

NEBRASKA

19—Iowa State	1
13—Minnesota	3
6—Colorado	1
13—Notre Dame	4
7—Kansas	2
15—U. C. L. A.	21
32—Kansas State	0
14—Oklahoma	4
6—Missouri	3
12—Oregon State	12

NEVADA

39—San Jose State	0
26—San Francisco	7
48—N. Texas State	7
48—St. Mary's (Cal.)	20
65—Tulsa	14
0—Okla. City	13
0—Santa Clara	14
53—Fresno State	7
32—Wichita	12

NEW HAMPSHIRE

19—Rhode Island	7
27—Maine	6
0—Springfield	23
0—Vermont	0
48—Northwestern	14
27—Tufts	18
20—Connecticut	7
14—Toledo	28

N. Y. U.

6—Cornell	47
0—Springfield	3
21—Brooklyn	7
7—Boston U.	28
21—Lehigh	0
6—Georgetown	13
0—Rutgers	40
35—Kings Point	6
0—Fordham	28

†N. CAROLINA

34—Texas	7
7—Georgia	14
28—Wake Forest	6
14—N. C. State	0
34—Louisiana State	7
14—Tennessee	7
7—Wm. & Mary	7
49—Maryland	20
20—Duke	0
34—Virginia	12

N. C. STATE

0—Duke	0
0—Clemson	6
40—Davidson	0
7—No. Carolina	14
7—Chattanooga	0
13—Wake Forest	34
14—Virginia	21
20—Duesse	6
6—Wm. & Mary	26
7—Villanova	21

NORTHWESTERN

19—U. C. L. A.	0
21—Purdue	0
19—Minnesota	16
0—Michigan	28
48—Syracuse	0
21—Ohio State	7
16—Wisconsin	7
7—Notre Dame	12
20—Illinois	7

*NOTRE DAME

28—Purdue	27
40—Pittsburgh	0
26—Mich. State	7
44—Nebraska	13
20—Iowa	12
41—Navy	7
42—Indiana	6
12—Northwestern	7
46—Washington	0

*Unbeaten. †Unbeaten but tied.

OHIO STATE

21—Missouri	7
20—So. California	0
7—Iowa	14
17—Indiana	0
34—Wisconsin	32
7—Northwestern	21
41—Pittsburgh	0
34—Illinois	7
3—Michigan	13

OKLAHOMA

17—Santa Clara	20
42—Texas A. & M.	14
20—Texas	14
42—Kansas State	0
21—T. C. U.	18
33—Iowa State	6
41—Missouri	7
41—Nebraska	14
60—Kansas	7
19—Okla. A. & M.	15

OKLA. A. & M.

27—Wichita	14
14—T. C. U.	21
27—Denver	7
27—San Francisco	20
41—Temple	7
7—Kansas	13
19—Tulsa	0
42—Kansas State	6
15—Oklahoma	19

OREGON

55—Santa Barbara	7
20—Stanford	12
0—Michigan	14
15—Iaho	8
8—So. California	7
33—Wash. State	7
14—St. Mary's (Cal.)	13
13—Washington	7
26—U. C. L. A.	7
10—Oregon State	0

OREGON STATE

27—Idaho	12
6—So. California	21
14—Washington	14
32—Portland	6
0—California	42
28—U. C. L. A.	0
21—Mich. State	46
26—Wash. State	26
20—Utah	10
0—Oregon	10
28—Nebraska	12

PENN STATE

35—Bucknell	0
4—Syracuse	14
37—West Virginia	7
14—Mich. State	14
32—Colgate	13
13—Pennsylvania	0
47—Temple	0
0—Pittsburgh	7
7—Wash. State	0

PENNSYLVANIA

26—Dartmouth	13
29—Princeton	7
20—Columbia	14
20—Navy	14
40—Wash. and Lee	7
0—Penn State	13
20—Army	26
14—Cornell	23

PITTSBURGH

14—So. Methodist	33
0—Notre Dame	40
16—West Virginia	6
21—Marquette	7
21—Indiana	14
20—Western Reserve	0
0—Ohio State	41
20—Purdue	13
7—Penn State	0

PRINCETON

20—Brown	23
7—Pennsylvania	29
6—Rutgers	22
16—Columbia	14
55—Virginia	14
47—Harvard	7
20—Yale	14
13—Dartmouth	33

PURDUE

27—Notre Dame	28
0—Northwestern	21
0—Michigan	40
20—Iowa	13
6—Illinois	10
14—Marquette	9
7—Minnesota	34
13—Pittsburgh	20
39—Indiana	0

R. P. I.

7—Alfred	13
21—Buffalo	39
14—Union	19
28—Worcester Tech	6
7—Rochester	14
27—Clarkson	14
6—Coast Guard Acad.	13
47—Brooklyn	13

RHODE ISLAND

56—Quonset Naval	0
7—Maine	13
7—New Hampshire	19
0—Brown	33
19—Massachusetts	12
21—Springfield	21
6—Connecticut	28

RICE

46—Sam Houston	0
13—Louisiana State	26
0—So. California	7
7—So. Methodist	33
7—Texas	20
14—Texas Tech	7
25—Arkansas	6
28—Texas A. & M.	7
21—T. C. U.	7
7— Baylor	7

RICHMOND

33—Randolph-Macon	0
0—Maryland	19
7—Furman	0
0—V. M. I.	9
28—Hamden-Sydney	7
6—Wm. & Mary	14
6—Davidson	0
7—Virginia Tech	7
14—Wash. & Lee	12

ROCHESTER

6—Amherst	26
6—Union	19
13—DePauw	26
7—Tufts	9
19—Sampson	7
14—R. P. I.	7
14—Vermont	14
47—Clarkson	0
0—Wesleyan	26

RUTGERS

6—Columbia	27
34—Colgate	19
34—Temple	20
22—Princeton	6
20—Lehigh	6
6—Brown	20
34—Lafayette	13
40—N. Y. U.	19
28—Fordham	19

ST. BONAVENTURE

7—Dayton	6
7—Boston College	7
13—Wayne	0
7—Wm. & Mary	6
21—St. Louis	0
6—Canisius	14
21—Niagara	0
28—St. Vincent	12
20—San Francisco	14

ST. LAWRENCE

7—Union	19
0—Vermont	7
14—Hobart	20
0—Clarkson	0
14—Champlain	6
6—Alfred	0
14—Norwich	0
7—Gettysburg	7

ST. MARY'S (Calif.)

32—Loyola	7
0—San Francisco	7
0—California	20
20—Nevada	48
33—Denver	22
13—Oregon	14
19—Portland	0
7—Santa Clara	10
7—Boston College	19
19—San Jose State	14

SAN FRANCISCO

7—St. Mary's (Cal.)	0
7—Nevada	26
7—Detroit	10
20—Okla. A. & M.	27
13—Santa Clara	25
28—Loyola	0
14—Coll. of Pacific	32
13—Villanova	46
14—St. Bonaventure	20

SANTA CLARA

19—California	41
20—Oklahoma	17
45—Fresno	7
27—Stanford	14
47—Loyola	0
0—So. Methodist	33
25—San Francisco	13
14—Nevada	0
10—St. Mary's (Cal.)	7
21—Mich. State	21

SO. CAROLINA

46—Newberry	0
7—Furman	0
0—Tulane	14
7—Clemson	13
12—West Virginia	35
7—Maryland	19
27—Tulsa	7
0—Wake Forest	38

SO. CALIFORNIA

27—Utah	0
21—Oregon State	6
0—Ohio State	20
7—Rice	0
7—Oregon	8
7—Stanford	6
7—California	13
32—Washington	7
20—U. C. L. A.	13

SO. METHODIST

33—Pittsburgh	14
41—Texas Tech	6
14—Missouri	20
33—Rice	7
33—Santa Clara	0
21—Texas	6
20—Texas A. & M.	14
14—Arkansas	12
13—Baylor	6
7—T. C. U.	7

STANFORD

26—San Jose State	20
12—Oregon	20
7—Wash. State	14
14—Santa Clara	27
34—U. C. L. A.	14
6—So. California	7
0—Washington	0
0—Army	43
39—Montana	7
6—California	7

SUSQUEHANNA

13—C. C. N. Y.	7
6—Allegheny	14
6— Juniata	14
0—Upsala	7
0—Penn M. C.	12
7—Wagner	19
7—Haverford	21
13—Ursinus	0

SWARTHMORE

26—Penn M. C.	38
20—Wesleyan	41
24—Ursinus	7
20—F. and M.	39
7—Johns Hopkins	19
33—Drexel	13
28—Haverford	28

SYRACUSE

13—Niagara	9
7—Holy Cross	33
14—Penn State	34
7—Cornell	34
0—Northwestern	48
7—Boston U.	12
0—Temple	20
13—Colgate	20
28—Columbia	34

TEMPLE

7—Lebanon Valley	7
7—West Virginia	27
20—Rutgers	34
7—Boston U.	13
7—Okla. A. & M.	41
20—Bucknell	0
20—Syracuse	0
0—Penn State	47
7—Holy Cross	13

TENNESSEE

6—Miss. State	21
7—Duke	7
26—Chattanooga	0
21—Alabama	6
41—Tenn. Tech	0
7—No. Carolina	14
13—Georgia Tech	6
13—Mississippi	16
0—Kentucky	0
6—Vanderbilt	28

TEXAS

33—Louisiana State	0
7—No. Carolina	34
47—New Mexico	0
14—Oklahoma	20
4—Arkansas	6
20—Rice	7
6—So. Methodist	21
13—Baylor	10
14—T. C. U.	7
14—Texas A. & M.	14

TEXAS A. & M.

14—Villanova	34
14—Texas Tech	20
14—Oklahoma	42
13—Louisiana State	14
14—T. C. U.	27
14—Baylor	20
6—Arkansas	28
14—So. Methodist	20
6—Rice	28
14—Texas	14

Team Records—(cont.)

TEXAS CHRISTIAN		UNION		VIRGINIA TECH.		WESLEYAN	
14—Kansas	13	19—St. Lawrence	7	0—George Washington	13	13—Bowdoin	0
21—Okla. A. & M.	14	19—Rochester	6	0—Virginia	28	20—Coast Guard	7
14—Arkansas	14	6—Vermont	7	0—Maryland	28	41—Warthorn	20
7—Indiana	27	35—R. P. I.	14	0—Wm. & Mary	30	27—Amherst	0
27—Texas A. & M.	14	25—Hobart	0	0—Duke	7	53—New England	0
18—Oklahoma	21	19—Williams	7	7—Army	49	28—Williams	7
3—Baylor	6	14—Middlebury	7	7—Wash. & Lee	14	16—Trinity	0
7—Texas	14	25—Hamilton	7	7—Richmond	7	26—Rochester	0
7—Rice	21			7—V. M. I.	33		
7—So. Methodist	7						
TEXAS TECH		UTAH		WAGNER		WEST VIRGINIA	
19—West Texas	0	0—So. California	27	14—Panzer	12	29—Waynesburg	16
20—Texas A. & M.	14	21—Idaho	6	13—Hofstra	13	34—Wooster	6
6—So. Methodist	41	47—Arizona	14	0—Upsala	12	27—Temple	7
41—Tulsa	20	30—Brigham Young	0	0—Brooklyn	20	6—Pittsburgh	16
0—Baylor	13	17—Denver	0	19—C. C. N. Y.	19	7—Penn State	37
31—Arizona	0	19—Wyoming	7	23—Ursinus	6	14—Wash. & Lee	7
7—Rice	14	14—Colorado	12	19—Susquehanna	7	35—So. Carolina	12
46—Texas Mines	6	0—Colorado A. & M.	3	12—Hartwick	25	48—Ohio U.	6
14—New Mexico	7	20—Oregon State	20			0—Virginia	7
28—Hardin-Simmons	20	41—Utah State	7			20—Western Reserve	0
						16—Maryland	14
TRINITY		VANDERBILT		WAKE FOREST		WEST MARYLAND	
33—Williams	6	0—Georgia Tech.	13	27—George Washington	13	21—Catholic U.	6
65—Norwich	0	14—Alabama	14	9—Boston College	26	41—Washington	0
52—Hobart	0	7—Mississippi	20	21—Wm. & Mary	12	20—Randolph-Macon	0
13—Middlebury	24	26—Kentucky	7	6—North Carolina	28	0—Gettysburg	2
33—Worcester	6	35—Yale	0	41—Duquesne	15	20—Mt. St. Mary's	14
46—Amherst	16	47—Auburn	0	34—N. C. State	13	13—Lebanon Valley	0
0—Wesleyan	16	48—Louisiana State	7	27—Duke	20	6—Johns Hopkins	7
		56—Marshall	0	14—Clemson	21		
		34—Maryland	0	38—So. Carolina	0		
		28—Tennessee	6				
TUFTS		VERMONT		WASHINGTON		WM. & MARY	
7—Bowdoin	28			0—Minnesota	20	14—Davidson	6
21—Colby	0	2—St. Michael's	13	14—Oregon State	14	12—Wake Forest	21
28—Bates	7	7—St. Lawrence	0	27—U. C. L. A.	6	31—V. M. I.	0
26—Rochester	7	7—Union	6	0—Wash. State	10	30—Virginia Tech.	0
13—Williams	14	14—Norwich	0	0—California	21	6—St. Bonaventure	7
13—Amherst	14	14—New Hampshire	0	0—Stanford	20	14—Richmond	0
18—New Hampshire	27	0—Massachusetts	33	7—So. California	32	7—No. Carolina	7
13—Massachusetts	13	14—Rochester	14	34—Idaho	7	14—Boston College	14
		12—Middlebury	13	0—Notre Dame	46	26—N. C. State	6
						9—Arkansas	0
TULANE		VILLANOVA		WASH. & JEFF.		WILLIAMS	
21—Alabama	14	34—Texas A. & M.	14	40—Bethany	0	14—Norwich	0
7—Georgia Tech	13	0—Army	28	15—Lafayette	56	6—Trinity	33
14—So. Carolina	0	46—Duquesne	0	33—Geneva	0	42—Champlain	0
20—Mississippi	0	19—Miami (Fla.)	10	14—Buffalo	41	0—Bowdoin	34
21—Auburn	6	13—Boston College	20	0—Carnegie Tech.	7	14—Tufts	13
9—Miss. State	0	27—Detroit	6	18—Bucknell	14	7—Union	19
28—V. M. I.	7	13—Kentucky	13	21—Muskingum	13	7—Wesleyan	28
35—Baylor	13	36—Georgetown	7	25—Ohio Wesleyan	26	7—Amherst	13
6—Cincinnati	0	46—San Francisco	13				
46—Louisiana State	0	21—N. C. State	7				
TULSA		VIRGINIA		WASH. & LEE		WISCONSIN	
19—Baylor	42			7—Furman	10	7—Indiana	35
14—Florida	28	14—Miami (Ohio)	14	13—Ohio U.	0	20—Illinois	16
20—Texas Tech.	41	28—Virginia Tech.	0	0—Georgia Tech.	27	14—California	40
7—Georgetown	13	12—Geo. Washington	20	6—Virginia	41	7—Yale	17
14—Nevada	65	41—Wash. & Lee	6	7—West Virginia	14	32—Ohio State	34
14—Wichita	14	26—V. M. I.	14	7—Pennsylvania	40	13—Iowa	19
0—Okla. A. & M.	19	14—Princeton	55	14—Virginia Tech.	7	7—Northwestern	16
7—So. Carolina	27	21—N. C. State	14	21—Davidson	26	26—Marquette	0
16—Arkansas	55	7—West Virginia	0	21—Delaware	14	0—Minnesota	16
22—Detroit	26	12—No. Carolina	34	12—Richmond	14		
U. C. L. A.		V. M. I.		WASH. STATE		YALE	
48—Wash. State	26			26—U. C. L. A.	48	28—Brown	13
0—Northwestern	19	28—Catawba	6	14—Stanford	7	7—Connecticut	0
28—Idaho	12	26—Geo. Washington	6	48—Montana	0	28—Columbia	34
6—Washington	6	0—Wm. & Mary	31	10—Washington	0	17—Wisconsin	7
14—Stanford	34	9—Richmond	0	19—Idaho	33	0—Vanderbilt	35
0—Oregon State	28	14—Virginia	26	26—Oregon State	26	14—Dartmouth	41
27—Nebraska	15	33—Davidson	6	14—California	44	52—Kings Point	0
13—California	28	7—Tulane	28	0—Michigan State	40	14—Princeton	20
7—Oregon	26	34—Citadel	6	0—Penn State	7	7—Harvard	20
13—So. California	20	33—Virginia Tech.	7				

Notre Dame-Army Series Record

1913 N. D. 35, A. 13	1923 N. D. 13, A. 0	1932 N. D. 21, A. 0	1940 N. D. 7, A. 0
1914 A. 20, N. D. 7	1924 N. D. 13, A. 7	1933 N. D. 13, A. 12	1941 A. 0, N. D. 0
1915 N. D. 7, A. 0	1925 A. 27, N. D. 0	1934 N. D. 12, A. 6	1942 N. D. 13, A. 0
1916 A. 30, N. D. 10	1926 N. D. 7, A. 0	1935 A. 6, N. D. 6	1943 N. D. 26, A. 0
1917 N. D. 7, A. 2	1927 A. 18, N. D. 0	1936 N. D. 20, A. 6	1944 A. 59, N. D. 0
1919 N. D. 12, A. 9	1928 N. D. 12, A. 6	1937 N. D. 7, A. 0	1945 A. 48, N. D. 0
1920 N. D. 27, A. 17	1929 N. D. 7, A. 0	1938 N. D. 19, A. 7	1946 A. 0, N. D. 0
1921 N. D. 28, A. 0	1930 N. D. 7, A. 6	1939 N. D. 14, A. 0	1947 N. D. 27, A. 7
1922 A. 0, N. D. 0	1931 A. 12, N. D. 0		

Professional Football

NATIONAL LEAGUE CHAMPIONS

Source: National Football League.

Year	Team	Won	Lost	Tied	Pct.	Year	Team	Won	Lost	Tied	Pct.
1921	Bears (Staley's)	10	1	1	.909	1937	Chicago Bears (W)	9	1	1	.900
1922	Canton Bulldogs	10	0	2	1.000	1938	New York Giants (E)	8	2	1	.800
1923	Canton Bulldogs	11	0	1	1.000	1938	Green Bay Packers (W)	8	3	0	.727
1924	Cleveland Bulldogs	7	1	1	.875	1939	Green Bay Packers (W)	9	2	0	.818
1925	Chicago Cardinals	11	2	1	.846	1939	New York Giants (E)	9	1	1	.900
1926	Frankford Yellow Jackets	14	1	1	.933	1940	*Chicago Bears (W)	8	3	0	.727
1927	New York Giants	11	1	1	.917	1940	Washington Redskins (E)	9	2	0	.818
1928	Providence Steamrollers	8	1	2	.888	1941	*Chicago Bears (W)	10	1	0	.909
1929	Green Bay Packers	12	0	1	1.000	1941	New York Giants (E)	8	3	0	.727
1930	Green Bay Packers	11	3	1	.786	1942	*Washington Redskins (E)	10	1	0	.909
1931	Green Bay Packers	12	2	0	.857	1942	Chicago Bears (W)	11	0	0	1.000
1932	Chicago Bears	7	1	6	.875	1943	*Chicago Bears (W)	8	1	1	.889
1933	*Chicago Bears (W)	10	2	1	.833	1943	Washington Redskins (E)	6	3	1	.667
1933	New York Giants (E)	11	3	0	.786	1944	*Green Bay Packers (W)	8	2	0	.800
1934	*New York Giants (E)	8	5	0	.615	1944	New York Giants (E)	8	1	1	.889
1934	Chicago Bears (W)	13	0	0	1.000	1945	*Cleveland Rams (W)	9	1	0	.900
1935	*Detroit Lions (W)	7	3	2	.700	1945	Washington Redskins (E)	8	2	0	.800
1935	New York Giants (E)	9	3	0	.750	1946	*Chicago Bears (W)	8	2	1	.800
1936	*Green Bay Packers (W)	10	1	1	.909	1946	New York Giants (E)	7	3	1	.700
1936	Boston Redskins (E)	7	5	0	.587	1947	*Chicago Cardinals (W)	9	3	0	.750
1937	*Washington Redskins (E)	8	3	0	.727	1947	Philadelphia Eagles (E)	9	4	0	.692

*Won title in play-offs. (W) Western Division champion. (E) Eastern Division champion.

CHAMPIONSHIP PLAY-OFF RESULTS

1933	Chicago Bears 23, New York Giants 21.	1941	Chicago Bears 37, New York Giants 9.
1934	New York Giants 30, Chicago Bears 13.	1942	Washington Redskins 14, Chicago Bears 6.
1935	Detroit Lions 26, New York Giants 7.	1943	Chicago Bears 41, Washington Redskins 21.
1936	Green Bay Packers 21, Boston Redskins 6.	1944	Green Bay Packers 14, New York Giants 7.
1937	Washington Redskins 28, Chicago Bears 21.	1945	Cleveland Rams 15, Washington Redskins 14.
1938	New York Giants 23, Green Bay Packers 17.	1946	Chicago Bears 24, New York Giants 14.
1939	Green Bay Packers 27, New York Giants 0.	1947	Chicago Cardinals 28, Philadelphia Eagles 21.
1940	Chicago Bears 73, Washington Redskins 0.		

NATIONAL LEAGUE STANDING, 1948

(Through Nov. 28)

Eastern Division					Western Division								
	W.	L.	T.	Pct.	Points For	Points Agst.		W.	L.	T.	Pct.	Points For	Points Agst.
*Philadelphia Eagles	8	1	1	.889	317	98	Chicago Cards	9	1	0	.900	329	198
Washington Redskins	6	4	0	.600	250	225	Chicago Bears	9	1	0	.900	312	113
New York Giants	4	6	0	.400	248	322	Los Angeles Rams	4	5	1	.444	255	242
Pittsburgh Steelers	3	7	0	.300	148	184	Green Bay Packers	3	8	0	.273	147	248
Boston Yanks	2	9	0	.182	137	358	Detroit Lions	2	8	0	.200	165	320

*Clinched divisional title Nov. 28.

ALL-AMERICA CONFERENCE STANDING, 1948

(Through Nov. 28)

Eastern Division					Western Division								
	W.	L.	T.	Pct.	Points			W.	L.	T.	Pct.	Points	
					For	Agst.						For	Agst.
Buffalo Bills	7	6	0	.538	345	323	*Cleveland Browns	13	0	0	1.000	358	169
Baltimore Colts	6	7	0	.462	298	312	San Francisco 49ers	11	2	0	.846	457	227
New York Yankees	5	8	0	.385	237	294	Los Angeles Dons	7	6	0	.538	237	267
Brooklyn Dodgers	2	11	0	.154	232	356	Chicago Rockets	1	12	0	.077	195	411

*Clinched divisional title Nov. 28.

AMERICAN LEAGUE STANDING, 1948

(Final)

	W.	L.	T.	Pct.	Points For	Points Agst.
Paterson Panthers	7	1	2	.875	224	103
Richmond Rebels	6	4	0	.600	164	142
Wilmington Clippers	5	4	1	.556	148	137
Jersey City Giants	5	5	0	.500	154	168
Bethlehem Bulldogs	4	5	1	.444	158	155
Wilkes-Barre Bullets	1	9	0	.100	57	200

Pro Football Crowd Mark Set

A pro football attendance record was set on Nov. 14, 1948, when 82,769 saw the Browns beat the Forty-Niners in an All-America Conference game in Cleveland.

CHICAGO ALL-STAR GAMES

1934	Chicago Bears 0, College All-Stars 0
1935	Chicago Bears 5, College All-Stars 0
1936	Detroit Lions 7, College All-Stars 7
1937	College All-Stars 6, Green Bay Packers 0
1938	College All-Stars 28, Washington Redskins 16
1939	New York Giants 9, College All-Stars 0
1940	Green Bay Packers 45, College All-Stars 28
1941	Chicago Bears 37, College All-Stars 13
1942	Chicago Bears 21, College All-Stars 0
1943	College All-Stars 27, Washington Redskins 7*
1944	Chicago Bears 24, College All-Stars 21*
1945	Green Bay Packers 19, College All-Stars 7
1946	College All-Stars 16, Los Angeles Rams 0
1947	College All-Stars 16, Chicago Bears 0
1948	Chicago Cards 28, College All-Stars 0

*Played at Evanston, Ill.

PROFESSIONAL FOOTBALL TEAM RECORDS, 1948

National League

(Through Nov. 28)

BOSTON

0—Green Bay	31
7—New York	27
14—Pittsburgh	24
17—Detroit	14
13—Pittsburgh	7
27—Chicago Cards	49
21—Washington	59
7—Washington	23
0—Philadelphia	45
17—Chicago Bears	51
14—New York	28

CHICAGO BEARS

45—Green Bay	7
28—Chicago Cards	17
42—Los Angeles	21
28—Detroit	0
7—Philadelphia	12
35—New York	14
21—Los Angeles	6
7—Green Bay	6
51—Boston	17
48—Washington	13

CHICAGO CARDS

21—Philadelphia	14
17—Chicago Bears	28
17—Green Bay	7
63—New York	35
49—Boston	35
27—Los Angeles	22
56—Detroit	20
24—Pittsburgh	7
27—Los Angeles	24
28—Detroit	14

DETROIT

7—Los Angeles	44
21—Green Bay	33
14—Boston	17
0—Chicago Bears	28
27—Los Angeles	34
24—Green Bay	20
20—Chicago Cards	56
21—Washington	46
17—Pittsburgh	14
14—Chicago Cards	28

GREEN BAY

31—Boston	0
7—Chicago Bears	45
33—Detroit	21
7—Chicago Cards	17
7—Los Angeles	0
20—Detroit	23
7—Pittsburgh	24
6—Chicago Bears	38
3—New York	49
10—Los Angeles	24

LOS ANGELES

44—Detroit	7
28—Philadelphia	28
21—Chicago Bears	42
0—Green Bay	16
34—Detroit	27
22—Chicago Cards	27
6—Chicago Bears	21
52—New York	37
24—Chicago Cards	27
24—Green Bay	10

NEW YORK

27—Boston	7
10—Washington	41
0—Philadelphia	45
35—Chicago Cards	63
34—Pittsburgh	27
14—Chicago Bears	35
14—Philadelphia	35
37—Los Angeles	52
49—Green Bay	3
28—Boston	14

PHILADELPHIA

14—Chicago Cards	21
28—Los Angeles	28
7—New York	45
45—Washington	0
12—Chicago Bears	7
34—Pittsburgh	7
35—New York	14
45—Boston	0
42—Washington	21
17—Pittsburgh	0

PITTSBURGH

14—Washington	17
24—Boston	14
10—Washington	7
7—Boston	13
27—New York	34
7—Philadelphia	34
38—Green Bay	7
7—Chicago Cards	24
14—Detroit	17
0—Philadelphia	17

WASHINGTON

17—Pittsburgh	14
41—New York	10
7—Pittsburgh	10
0—Philadelphia	45
23—Green Bay	7
59—Boston	21
23—Boston	7
46—Detroit	21
21—Philadelphia	42
13—Chicago Bears	48

All-America Conference

(Through Nov. 28)

BALTIMORE

45—New York	28
14—Chicago	21
27—New York	14
35—Brooklyn	20
10—Cleveland	14
14—San Francisco	56
29—Los Angeles	14
10—San Francisco	21
17—Buffalo	35
7—Cleveland	28
38—Chicago	24
14—Los Angeles	17
38—Brooklyn	20

BROOKLYN

3—New York	21
20—San Francisco	36
7—Los Angeles	17
20—Baltimore	35
21—Buffalo	31
17—Cleveland	30
21—Chicago	7
35—Chicago	14
0—Los Angeles	17
21—Buffalo	26
7—New York	21
40—San Francisco	63
20—Baltimore	38

BUFFALO

14—San Francisco	35
42—Chicago	7
13—Cleveland	42
28—San Francisco	38
31—Brooklyn	21
13—New York	14
14—Cleveland	31
35—Los Angeles	21
35—Baltimore	17
26—Brooklyn	21
20—Los Angeles	27
39—Chicago	35
35—New York	14

CHICAGO

0—Los Angeles	7
7—Buffalo	42
21—Baltimore	14
7—Cleveland	28
10—Cleveland	21
14—San Francisco	31
28—Los Angeles	49
7—Brooklyn	21
14—Brooklyn	35
7—New York	42
21—San Francisco	44
24—Baltimore	38
35—Buffalo	39

CLEVELAND

19—Los Angeles	14
42—Buffalo	13
28—Chicago	7
21—Chicago	10
14—Baltimore	1
30—Brooklyn	1
31—Buffalo	14
35—New York	7
28—Baltimore	7
14—San Francisco	7
34—New York	21
31—Los Angeles	14
31—San Francisco	28

LOS ANGELES

7—Chicago	0
14—Cleveland	19
17—Brooklyn	7
14—San Francisco	36
20—New York	10
49—Chicago	28
14—Baltimore	29
21—Buffalo	35
17—Brooklyn	0
6—New York	38
27—Buffalo	20
17—Baltimore	14
14—Cleveland	31

NEW YORK

21—Brooklyn	3
28—Baltimore	45
0—San Francisco	41
14—Baltimore	27
10—Los Angeles	20
14—Buffalo	13
7—San Francisco	21
7—Cleveland	35
42—Chicago	7
38—Los Angeles	6
21—Brooklyn	7
21—Cleveland	34
14—Buffalo	35

SAN FRANCISCO

35—Buffalo	14
36—Brooklyn	20
41—New York	0
36—Los Angeles	14
38—Buffalo	28
31—Chicago	14
56—Baltimore	7
21—New York	14
21—Baltimore	10
44—Chicago	21
7—Cleveland	14
63—Brooklyn	40
28—Cleveland	31

JAN. 1, 1949, BOWL GAMES

- ROSE (Pasadena, Calif.)—California—Northwestern
- COTTON (Dallas)—Southern Methodist—Oregon
- SUGAR (New Orleans)—North Carolina—Oklahoma
- ORANGE (Miami, Fla.)—Georgia—Texas
- GATOR (Jacksonville, Fla.)—Missouri—Clemson
- DIXIE (Birmingham, Ala.)—Wake Forest—Baylor
- DELTA (Memphis)—Oklahoma A. & M.—William and Mary
- SUN (El Paso, Texas)—West Virginia—Texas Mines

WHO'S WHO IN SPORTS

Baseball

- MUSIAL, Stan, b. Donora, Pa., Nov. 21, 1920.
- ONSLow, Jack, b. Scottdale, Pa., Oct. 13, 1889.
- ROLFE, Robert (Red), b. Penacook, N. H., Oct. 17, 1908.

Football

- STRADER, Norman (Red), b. Newton, N. J., Dec. 21, 1904.

Jumping Award to Trader Bedford

Arthur M. Nardin's black gelding Trader Bedford won the Professional Horsemen's Association Trophy for season-long jumping competition on the show circuit in 1948.

HORSE RACING

Steeplechase Winners

Stake, track, winner, jockey, weight	Win val.
APPLETON (BE)—The Heir, D. Clingman, 135	\$7,850
BROAD HOLLOW (BE)—The Heir, C. H. Williams, 148	\$13,800
BROOK (BE)—Trough Hill, T. Field, 142	13,500
BUTLER (L)—Drift, H. Harris, 134	9,460
CHEVY CHASE (L)—American Way, D. Marzani, 148	12,850
CORINTHIAN (BE)—Fleetown, D. Marzani, 147	8,025
GEORGETOWN (DP)—American Way, D. Marzani, 144	9,050
GLENDALE (AQ)—Trough Hill, T. Field, 139	7,400
GOV. OGLE (L)—Homogenize, F. D. Adams, 134	8,480
HARBOR HILL (AQ)—Tourist List, F. Hutcherson, 145	8,000
INDIAN RIVER (DP)—Elkridge, J. Bosley, 3d, 151	8,800
INTERNATIONAL (BE)—Fleetown, D. Marzani, 141	8,200
JERVIS SPENCER (P)—Lieut. Well, J. Schweizer, 144	8,375
LION HEART (AQ)—The Heir, R. S. McDonald, 142	7,925
MAWLY (P)—Adaptable, P. Smithwick, 141	13,075
Meadow Brook (BE)—Adaptable, P. Smithwick, 146	12,150
NORTH AMERICAN (S)—Elkridge, J. Rich, 152	6,200
SARATOGA (S)—Tourist List, F. Hutcherson, 142	7,700
SHILLELAH (S)—Elkridge, J. Rich, 154	5,975
TEMPLE GWATHMEY (BE)—Adaptable, P. Smithwick, 150	11,050
TOM ROBY (DP)—Rank, B. Ansteatt, 140	9,650

1948 THOROUGHBRED CHAMPIONS

Horse of the Year—Citation
 Handicap Division—Citation
 Handicap Mare—Conniver
 3-Year-Old—Citation
 3-Year-Old Colt—Citation
 3-Year-Old Filly—Miss Request
 2-Year-Old—Blue Peter
 2-Year-Old Colt—Blue Peter
 2-Year-Old Filly—Myrtle Charm
 Sprinter—Coaltown
 Steeplechaser—American Way

OTHER A. A. U. CHAMPIONS, 1948

Running

15 KM.—Victor Dyrvall, Millrose A. A., New York
 20 KM.—Victor Dyrvall
 25 KM.—Victor Dyrvall
 30 KM.—Victor Dyrvall

Walking

10 KM.—Henry H. Laskau, Maccabi A. C., New York
 15 KM.—John Deni, Pittsburgh, and William Mihaló, Thompson Products Club, Detroit (tie)
 20 KM.—Morris Fleischer, Maccabi A. C., New York
 30 KM.—Chris Clegg, Canadian Walkers Assn., Toronto
 40 KM.—John Deni
 50 KM.—Ernie Crosbie, White Horse Social Club, Baltimore

Melbourne Cup to Rimfire

Rimfire, a 66-to-1 shot, won the 1948 running of the \$60,000 Melbourne Cup before a crowd of 100,000. Rimfire's time of 3:21 was a record for the historic two-mile event. Another of Australia's well-known races, the Caulfield Cup, was taken by Red Fury.

TRACK AND FIELD

World Records Approved in 1948

(These records, announced by the I.A.A.F. on Nov. 30, replace or tie the marks for the same events listed on pages 777, 778 and 779.)

400-METER RUN—0:45.9 by Herb McKenley of Jamaica at Milwaukee, Wis., July 2.
 2,000-METER RUN—5:07 by Gaston Reiff of Belgium at Brussels, Sept. 29.
 30,000-METER RUN—1:40:46.6 by Mikko Heitanen of Finland at Jyväskylä, Finland, June 20.
 FIVE-MILE WALK—35:43.4 by Harold G. Churcher of Britain at London, June 5. Distance not previously recognized for record purposes.
 HAMMER THROW—193 feet 7½ inches by Irme Nemeth of Hungary at Tata, Hungary, July 14.
 DISCUS THROW—181 feet 6½ inches by Adolfo Consolini of Italy at Milan, Oct. 10.
 WOMEN'S 100-METER DASH—0:11.5 by Mrs. Fanny Blankers-Koen of Holland at Amsterdam, June 13. Equals record held by Helen Stephens of United States.
 WOMEN'S 80-METER HURDLES—0:11.0 by Mrs. Blankers-Koen at Amsterdam, June 20.
 WOMEN'S 440-YARD RELAY—0:47.4 by The Netherlands—G. De Jongh, N. Witziers-Timmer, G. V. D. Kade-Koudy and F. Blankers-Koen, at Ryswyk, Holland, July 25.
 WOMEN'S JAVELIN THROW—158 feet 2 inches by H. Bauma of Austria at Vienna, June 29.

NATIONAL Y.M.C.A. CHAMPIONS, 1948

BASKETBALL—Prospect Park, Brooklyn
 SWIMMING—University Circle, Cleveland
 VOLLEYBALL—*North Hollywood, Calif.
 VETERANS' VOLLEYBALL—Central, Minneapolis
 *Also won U. S. Open and National A. A. U. titles.

Handball

SENIOR

SINGLES—Stanley Hitz, Harrisburg, Pa.
 DOUBLES—D. Pahl—E. Gluckler, West Side, New York

JUNIOR

SINGLES—Carl Koch, Detroit
 DOUBLES—Stanley Shimkus—Carl Koch, Detroit

TENNIS

National Hart-Court Champions

SINGLES—Ted Schroeder, Glendale, Calif.
 WOMEN'S SINGLES—Gertrude Moran, Santa Monica, Calif.
 DOUBLES—Vic Seixas, Philadelphia—Ted Schroeder
 WOMEN'S DOUBLES—Louise Brough, Beverly Hills, Calif.—Mrs. Margaret O. du Pont, Wilmington, Del.
 MIXED DOUBLES—Tom Brown, San Francisco—Mrs. Margaret O. du Pont

AUTO RACING

Final 1948 Championship Standing

	Points
1. Ted Horn, Paterson, N. J.	1,890
2. Myron Fohr, Milwaukee, Wis. ...	1,113
3. Mauri Rose, South Bend, Ind. ...	1,000
4. Bill Sheffler, Los Angeles, Calif.	924.8
5. Duke Nalon, Sherman Oaks, Calif.	910
6. Lee Wallard, Schenectady, N. Y.	865
7. Bill Holland, Reading, Pa.	840
8. Mack Hellings, Burbank, Calif. ..	820
9. Emil Andres, Chicago, Ill.	810
10. Charles Van Acker, South Bend, Ind.	760

HORSE SHOWS

Championship Awards of the New York
National Show

Jumping

MILITARY TEAM—Mexican Army (Capt. Victor M. Saucedo-Carrillo, Capt. Ruben Uriza, Capt. Alberto Valdes, Col. Humberto Mariles)

MILITARY INDIVIDUAL—Col. Humberto Mariles with Arete, Mexican Army

OPEN—Mrs. Hubert Thomas' bay mare Velvet Lassie, Carmel, Ind.

Hunter

CONFORMATION—Llangollen Farms' chestnut gelding Adventure, Upperville, Va.

WORKING—Lt. Col. W. Randolph Tayloe's chestnut gelding Goldwick, Boyce, Va.

YOUNG—J. A. Hale's chestnut gelding Glen Erin, Greenwich, Conn.

Horsemanship (over fences)

A.S.P.C.A. MACLAY TROPHY—Charlotte Hanlon, Westport, Conn.

Equitation

NATIONAL HORSE SHOW CHAMPIONSHIP—Barbara Pease, Larchmont, N. Y.

CROSS-COUNTRY

National A. A. U. Champions, 1948

INDIVIDUAL—Robert Black, Rhode Island State

TEAM—Michigan State

Intercollegiate Champions, 1948

INDIVIDUAL

N.C.A.A.—Robert Black, Rhode Island State

I.C. 4-A—Robert Black

HEPTAGONAL—Stanton Waterman, Dartmouth

SOUTHERN CONFERENCE—Bob Palmer, Maryland

CENTRAL COLLEGIATE—Jim Murphy, Notre Dame

MIDDLE ATLANTIC—Jim Grosholz, Haverford

TEAM

N.C.A.A.—Michigan State

I.C. 4-A—Michigan State

HEPTAGONAL—Army

SOUTHERN CONFERENCE—Maryland

CENTRAL COLLEGIATE—Notre Dame

MIDDLE ATLANTIC—St. Joseph's (Phila.)

SOUTHWEST CONFERENCE—Texas A. & M.

GOLF

Other 1948 Champions

MATCH PLAY

MEXICAN AMATEUR—Frank Stranahan

HARDSCRABBLE OPEN (women)—Patty Berg

MEDAL PLAY

	Score
NORTH-SOUTH OPEN —Toney Penna	285
HAWAIIAN OPEN —Cary Middlecoff	274

Five-gaited Saddle Horse

CHAMPION STAKE—Dodge Stables' chestnut stallion Wing Commander, Rochester, Minn.

AMATEUR STAKE—Brynfan Tyddyn's black gelding Out of the Night, Alderson, Pa.

JUNIOR—Dodge Stables' chestnut mare Show Boat

Three-gaited Saddle Horse

GRAND CHAMPION STAKE—Delaine Farm's chestnut gelding Knight's Treasure, Morton Grove, Ill.

CHAMPION STAKE (over 15.2)—Dodge Stables' chestnut gelding By Appointment

CHAMPION STAKE (over 14.2, not exceeding 15.2)—Knight's Treasure

CHAMPION STAKE (over 14.2, ridden by amateurs)—Carolanne Farm's bay gelding Bandbox Ben, Norfolk, Va.

Harness Horse

CHAMPION HARNESSE HORSE STAKE—Hawthorn Farms' brown gelding Wensleydale Pilot, Libertyville, Ill.

CHAMPION HARNESSE PONY STAKE—Virginia Penfield Seybold's bay stallion Cadet Commander, Columbus, Ohio

FINE HARNESSE STAKE—Max Luther's bay mare Sally Co-Ed, Huntsville, Ala.

CYCLING

Six-Day Race Winners, 1948

BUFFALO—Cesare Moretti, Italy-Rene Cyr, Canada

CHICAGO—Walter Diggelman-Hugo Koblet, Switzerland

CLEVELAND—Francis Grauss, France-Angelo De Bacco, Newark, N. J.

NEW YORK (March)—Alvaro Georgetti, Italy-Angelo De Bacco

NEW YORK (October)—Louis Saen-Emile Bruneau, Belgium

NEW YORK (November)—Alvaro Georgetti-Cesare Moretti, Italy

RIFLE AND PISTOL SHOOTING

1948 Rifle-Shooting Champions

	Score
DEWAR TROPHY —United States	7905x8000

National

INDIVIDUAL—Arthur Cook, Washington, D. C. 3150x3200

INTERCOLLEGIATE—Thomas St. L. Moncure, George Washington 288x300

INTERCOLLEGIATE TEAM—U. S. Naval Academy 1405x1500

INTERSCHOLASTIC—Donald Downen, Tulsa, Okla. 193x200

INTERSCHOLASTIC TEAM—Napa (Calif.) High 748x800

1948 Pistol-Shooting Champion

INDIVIDUAL—Harry Reeves, Detroit 2611x2700

Record Furse to Mangrum

Lloyd Mangrum's victory in the George S. May winner-take-all "world championship" tournament at Chicago last August was worth \$10,000, the largest single amount ever posted in the history of golf.

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Compiled by

ROBERT E. GRAYSON

Librarian, New York Herald Tribune



A

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